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ABLETREND

Identifying and Analyzing Market Trends for Trading Success

JOHN WANG AND GRACE WANG

Foreword by Larry Williams

author of *Long-Term Secrets to Short-Term Trading* and *Trade Stocks & Commodities with the Insiders*

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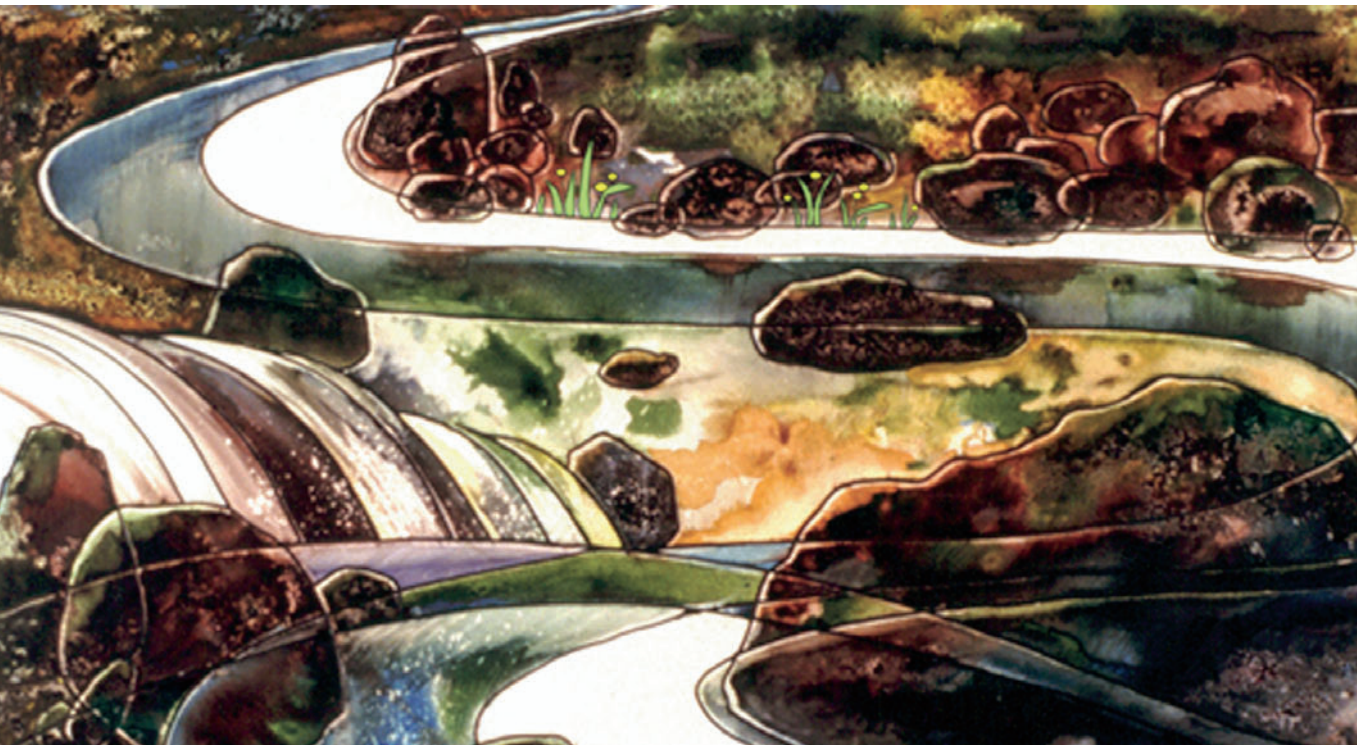

AbleTrend

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AbleTrend

Identifying and Analyzing Market Trends for Trading Success

JOHN WANG
GRACE WANG

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Published simultaneously in Canada.

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Library of Congress Cataloging-in-Publication Data:

Wang, John, 1945–
Abletrend : identifying and analyzing market trends for trading success / John Wang, Grace Wang.
p. cm.—(Wiley trading series)
Includes bibliographical references and index.
ISBN 978-0-470-58120-9 (cloth)
1. Investment analysis. 2. Portfolio management. I. Wang, Grace, 1954– II. Title.
HG4529.W355 2010
332.63′2042—dc22 2009044661

Printed in the United States of America.

10 9 8 7 6 5 4 3 2 1

To all clients supporting AbleSys in the last 15 years.

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Foreword

Books are like children, they say; they don't happen in a day. As someone who has written 10 books, I assure you it is a process of more than writing. It is a process of distilling information you have learned over the years into what you hope will be passed on through the ages. Like children, books are nurtured, eventually taking on a life of their own.

I have seen that take place with this book. John and Grace Wang became friends and students of mine almost 20 years ago. Like all searchers of truth, they have had more than one teacher; they have learned from others, then took off on their own flight. I would like to think that in some small way I set them on the path that has led them to this book. I have seen them exceed my expectations, but also become an even bigger market influence than anything I had hoped for myself. What could be better? To see someone outperform one of their teachers is, to me, an exhilarating experience.

It has been my good fortune to see them become a driving force within this industry, to see them help many traders throughout the world with their trading strategies and systematic approaches. Their software has become one of the most popular ones of all time for traders to use. What an accomplishment; what an honor on their part! And now they're going to open the door to their market systems.

While many people will be reading this book to learn about their approach to the market—how to trade, how to manage money, and what really works in the art of trading—I find there is an equal lesson here, which is about accomplishing greatness within your business or profession. They have certainly done that.

The lesson is that there are monetary rewards from trading, but the greatest reward in this business is to see people excel. Money is so ephemeral; other people's success in life lasts generations.

Most anyone can write a book . . . it is not writing . . . it is the content of your writing that matters. In this book you are going to learn the distillation of their research and work spanning several decades.

The authors were critically educated at the University of California, Santa Cruz, in the sciences; that's why I think you'll find their work to be so invaluable—because it is written not only from the heart and experience of trading but because everything they do is based on the scientific method.

In this day and age of trading, books have been written about everything from supposed fractals of chaos to imaginary cycles and waves, all things that cannot be proven.

In this book you are going to learn what has been proven in many markets for many years. This is a practical book; no pie-in-the-sky abstract concepts here.

I found their writing style easy to follow, easy to comprehend, and chock-full of practical trading strategies. What more could a person want?

Read it and prosper!

LARRY WILLIAMS

Preface

Spring waters surged up the riverbank last night, Like weightless feathers the heavy vessels float.

Rigorous labor pushed ships forward in the past, Down midstream on strong waves I ride effortlessly today.

—Zhu Xi (1130 to 1202)

FIGURE P.1 Trend Following—Effortlessly Riding the Strong Waves Down the Middle of the Stream.
Pen sketch by Victor K. Wang (1958) with permission.

The poem by Zhu Xi and the boats illustrated in Figure P.1 describe the enjoyment of trend following in trading, as well as my feeling at the moment of finishing this book. Zhu was a Song Dynasty (960 to 1279) Confucian scholar who became the

renowned leading figure of the School of Principle, and the most influential rationalist Neo-Confucian in China. His poem expresses the power of using natural law to fulfill one's aims—a truth that has been the abiding principle underlying all my work.

I never dreamed that I would one day write a book about trading. Nor did I realize how important my discovery of AbleTrend would be for others. Rather, at first I succumbed to the secrecy of the trading business and only shared my findings with a limited group of my seminar attendees. Now, however, I recognize that it is time to introduce AbleTrend and its advantages to a wider audience.

Natural law is the guiding principle behind everything we see, even though we may not be aware of it. For example, gravity has always existed from the earliest creation of the world; but it seemed people were not aware of its existence until one day when Newton's "Universal Law of Gravitation" was published. Similarly, the market trend has always existed; but I could not identify it—or take advantage of it—until one day in 1994 when I discovered a simple way—the "AbleTrend" way—to observe the trend.

Tens of thousands of AbleTrend users have helped us at AbleSys to grow over the last 15 years. We owe them a great deal because of their persistent support through all that time. I want to dedicate this book and issue a special "thank you" to every AbleSys client who has practiced our trend-following methods, and helped validate the trading system that can be applied to any market, any time chart, and anywhere in the world.

Most AbleTrend users are familiar with the way the software presents its trend findings on price charts in the form of blue bars, red bars, blue dots, red dots, and so forth. Here, in this book, I want to share with them more about the principles and philosophy underlying AbleTrend so that users may feel and get inside its soul and life.

But the purpose for this book goes beyond that. I believe that every trader—whether an AbleTrend user or not—can develop a deeper comprehension of how to trade the markets by understanding the universal principles that were used to develop the AbleTrend software. My intention in writing this book is to introduce these individuals to new concepts of trend following that they can use in their trading and benefit from for years to come.

In preparation for writing this book, we began to review hundreds of testimonials from AbleTrend users that we have received over the past 15 years. I would like to quote a few of these testimonials here to show what others think about the AbleTrend:

> *About 2 weeks ago, I got your brochure in the mail. I'll admit, I threw it away! But after pulling it back out of my waste basket (3 times), I finally contacted your company for a trial. Am I ever glad I did! I have made 12 trades with AbleTrend and only lost on one trade so far (which was my fault). I feel great, because now I'm in control. Thank you for your excellent system, online training classes, and getting me started on the right foot.*
>
> —Tom Kewan, WI

Among all the trading software I bought, AbleTrend 7.0 is the most simple and easy to use, and it makes money. I've bought many trading software during the years. I've been using AbleSys software since June 2006, trading E-mini S&P500 between 2 to 4 Eastern Time and I am trading 9 contracts. One of the helpful services that AbleSys offers is its Tuesday and Thursday free Webinars. Just picked up one great idea last week, the Guidance Chart, which helps me to scalp the market while staying on top of the bigger picture of the market direction.

—Dr. Edward Christy, MI

Dear AbleSys, I have never had such a good system-strategy as the AbleTrend 7.0 and I have been in this business for more than 20 years.

—Martin Schakowski, Switzerland

I have spent over $30,000 on trading software over the years. eASCTrend is the first piece of trading software that I've come across, which is simple to use and has a built-in algorithm that actually works and can consistently make money. eASCTrend T2 stops provide the best support and resistance indicators; they are reliable and dynamic. The friendly and concerned support from AbleSys is second to none.

—Greg Clements, Australia

We could easily go on. It is so gratifying to us to read such feedback from our clients, and to learn that they are doing so well and continuing to progress in their trading success. These facts ignite my spirits and make me want to bring more inside knowledge to them concerning the universal trading principles that underlie the functioning of our software. And I believe that all traders, not just AbleTrend users, will benefit from learning these fundamental concepts.

These principles are basic to all aspects of life, and not just trading. Understanding them will perhaps bring readers more in harmony with their body and mind, with their family and acquaintances, and eventually with the markets.

It is my hope that you will truly learn something valuable from this book. The concepts are laid out in straightforward language, in textbook style, with several examples to explain each concept. Educators say that people cannot learn a concept until it is repeated seven times with different applications. That is the way this book has been structured. When you complete this book, I suggest you come back to Chapter 2 to review the topic "What Is a Trend?" By that time, you will truly understand the contents of this book.

WHAT YOU WILL FIND IN THE BOOK

AbleTrend users in more than 60 countries and regions, trading different financial markets—some of which I am not even familiar with!—have put the concepts of this

book to a practical test. This book was written in response to their wish that the concepts and philosophy behind our software be placed within the reach of all who are interested.

This book includes seven chapters and two appendixes:

- Chapter 1 is about the birth of AbleTrend. Is the market completely chaotic or is there a hidden order? How did I discover AbleTrend with scientific methods?
- Chapter 2 is the most important chapter, where the foundation of this book is laid out. There we introduce new concepts about the trend: What is the scientific definition of a trend? How do we pinpoint the very beginning and ending point of a trend? How do we define a market's own protective stops? With an immense number of charts, we explain step by step our points of view of support and resistance. And we provide a few real examples (or homework) to explain trends, stops, entry points, and so forth.
- Chapter 3 discusses the four elements on which you build success in trading.
- Chapter 4 presents essential trading philosophy in terms of trend-following methods, especially drawing on the wisdom of the Tao.
- Chapter 5 covers issues of applying AbleTrend to trading, based on our concepts of trends. This chapter lays out from theory to application specifically how to trade the markets.
- Chapter 6 presents 13 examples of trend analysis, with charts, to show how the trend-following method works in some common markets.
- Chapter 7 introduces the design concepts behind some special trading tools provided by the trading software, along with their applications.
- Appendix A presents 10 interviews with AbleTrend users who share their points of view, experiences, and trading methods.
- Appendix B provides a quick reference guide for Simplified Trading Method (STM).

WHAT YOU WILL FIND ON THE WEB SITE

AbleTrend is an award-winning trading system software by AbleSys Corporation. From 1997 to 2009, it was honored with the Readers' Choice Awards of *Stocks & Commodities* magazine in Stock Trading Systems, Futures Trading Systems, and Options Trading Systems. The AbleTrend trading system has recently made the *Stocks & Commodities* magazine "Top 10" list from 2001 to 2009.

AbleSys Corporation (ASC) is a worldwide leader in universal financial trading software and Web application. As the creator of the benchmark ASCTrend indicator, AbleSys has long been synonymous with cutting-edge financial trading technology. AbleSys strives to develop innovative products and services that meet users' evolving needs in the Internet age. Founded in 1994, AbleSys is a Commodity Trading Advisor (CTA) registered with the Commodity Futures Trading Commission (CFTC), specializing in trading software and Internet applications. Products include AbleTrend, ASCTrend, and WinTick.

As this book purchaser, you may go to a special web site, www.wiley.com/go/abletrend (password: wang), for a **FREE 80-minute video course** about Simplified Trading Method (STM). The value of the training course is $99. For more information about AbleTrend trading software, please visit **www.ablesys.com** or send an e-mail to wileybooks@ablesys.com.

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> *Futures, forex, options, and securities trading has risk of loss and may not be suitable for all persons. No system can guarantee profits or freedom from loss. Past results are not necessarily indicative of future results. Hypothetical or simulated performance results have certain inherent limitations. Unlike an actual performance record, simulated results do not represent actual trading. Also, since the trades have not actually been executed, the results may have under- or over-compensated for the impact, if any, of certain market factors such as lack of liquidity. Simulated trading programs in general are also subject to the fact that they are designed with the benefit of hindsight. No representation is being made that any account will or is likely to achieve profits or losses similar to those shown. This disclaimer should be applied to the whole book.*

AS YOU BEGIN

You don't become great at trading in a day. You become great at trading day by day. This book opens a gate to the inside of the markets, providing readers with a better understanding of the market's behaviors, actions, and trends. I hope that some day you may come into harmony with the markets, because it is only then that consistent profits can be achieved.

Acknowledgments

Many people deserve to be acknowledged at this time. Unfortunately, I am unable to thank everyone who has in some way contributed to this work. I would, however, like to single out the following people for particular appreciation.

I want to thank my family: My affectionate father and mother who have passed away, but whose eternal love is the source of all my endeavors; my wife Grace, for her unconditional love, understanding, and assistance; without her, there would be no AbleSys, no AbleTrend, nor this book; and my brother Victor, a fine artist, who financially supported me from age 11 to the completion of my undergraduate education.

I also want to show gratitude to all my teachers, both in China and in the United States. To those who helped me learn in school, I owe much of the technical skills and knowledge that became the foundation of this work: to the University of California (UC) Santa Cruz for the UC Regency Fellowship and other scholarships over six years that enabled me to start my new chapter of life in the United States; to Vic Schmidtmann, my first supervisor at work, who gave "Able" to this company's name; to Patricia Sullivan, who helped Grace to study abroad in the United States in the early 1980s; to all the great people who worked and are working at AbleSys, especially the software development team—Yi Fan, Wilson Yang, Chris Szybalski, Kevin Copley, George Woodley et al.; because of them the AbleTrend software is made possible; to all those people who have helped me, I owe a great deal.

I wish to express my special appreciation to those who have participated in the creation of this book—to legendary trader and my teacher Larry Williams for his courage, guidance, and support; to Ellen Dickstein, for her careful and time-consuming editing and proofreading; to my son Jesse, for his input on the construction of this book and partial writing of it, and for his producing a CD of the STM course for this book; to Victor, my brother, for his deep understanding of Tao and for teaching me the Tao philosophy, and for his paintings and calligraphy that illustrate this book; again, to my wife, Grace, for her first proposal, structured ideas and outlines, and a great amount of writing, because of which we have this book; and to the great people at John Wiley & Sons, who made this book become a reality.

JOHN Z. WANG
March 2010

CHAPTER 1

The Search for a Universal Market Law

The Rise of AbleTrend

I don't know its name. If we must give it a name, let's call it "Tao."
—*Tao* by Lao-tzu

The AbleTrend trading system software was first developed in 1994 and was released to the market in 1995. It is now used by tens of thousands of traders in more than 60 countries. Many of these users have been trading market symbols that we in the United States have never even heard of, and yet it still works.

People have asked us "how often" we have to change our formula in order to keep it working properly in today's fast-changing global markets. Our answer is: not at all. The formula has remained the same as when it was first created. It worked in any market then, and it works now. It is timeless.

As a developer of AbleTrend, I am asked very often how AbleTrend was developed. What are the principles behind it? What is the underlying philosophy? This chapter addresses these most-asked questions.

COMPLETE CHAOS OR HIDDEN ORDER?

These are common questions that I am most often asked by traders:

- Is market behavior random or does it follow certain rules?
- Is the market completely chaotic or is there a hidden order?
- Can markets be quantified or predicted using scientific methods?

Most economists believe that markets are random, chaotic, and cannot be predicted. A very smart man once told me, if you could know just a little bit of the market law, the world would be yours. But most people just don't believe there is such a thing as market law.

I believe my work has proven them wrong. Because of AbleTrend, the order that underlies market movement can now be easily plotted on charts. Figures 1.1 through 1.5 show the buy/sell signals and support resistance levels provided by AbleTrend in several different times of financial crisis. As you can see, AbleTrend never missed any big moves. Looking at these charts, what do you now think? Is the market completely chaotic, or could it be possible that there is a hidden order?

- During the economic crisis of 2008 to 2009, an AbleTrend sell signal was given on 9/4/2008, before the big market drop, and a buy signal was given on 3/13/2009 before the market soared in 2009 (see Figure 1.1).
- Figure 1.2 shows the AIG stock chart from 2005 to 2009. A sell signal for AIG stock was given on 7/22/2007, and the stock lost 99 percent of its value from there.
- The crude oil futures weekly chart from 2004 to 2009 is depicted in Figure 1.3. The buy and sell signals of AbleTrend caught the big moves for all major up and down trends.
- Figure 1.4 shows the S&P 500 index chart in 2001. The AbleTrend sell signal was one month ahead of "9/11" of 2001 and the big market drop.
- Figure 1.5 depicts the S&P 500 index chart in 1987. The AbleTrend Sell signal was 10 days ahead of "Black Monday" (10/19/1987), the 1987 stock market crash.

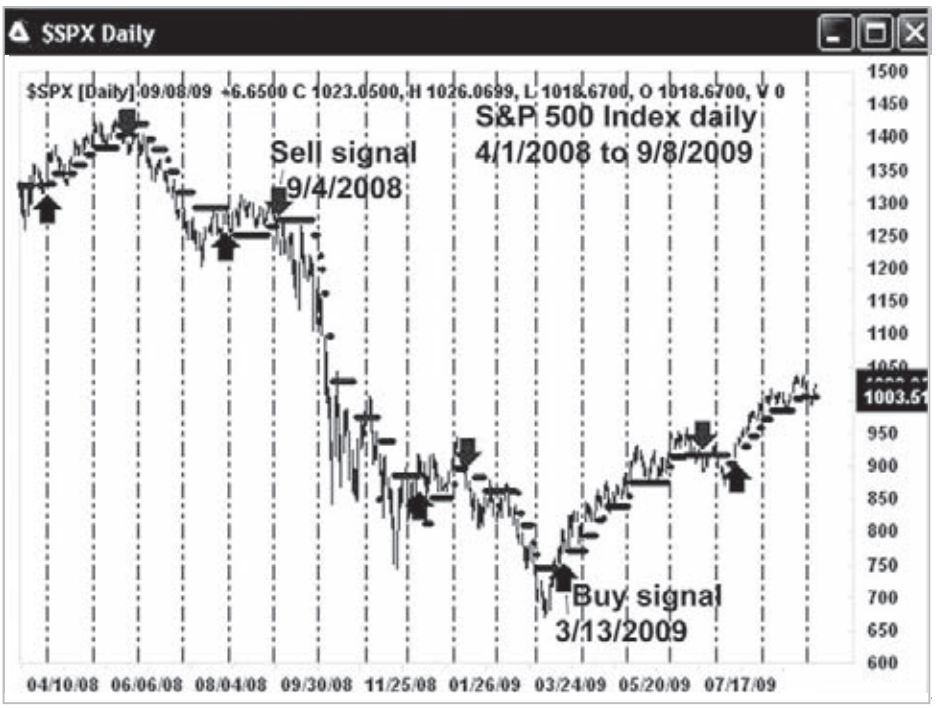


FIGURE 1.1 S&P 500 index chart 2008 to 2009. AbleTrend gave a sell signal on 9/4/2008, before the economic crisis hit.

FIGURE 1.2 AIG stock chart 2005 to 2009. A sell signal for AIG stock was given on 7/22/2007. AIG lost 99 percent of its value after that.

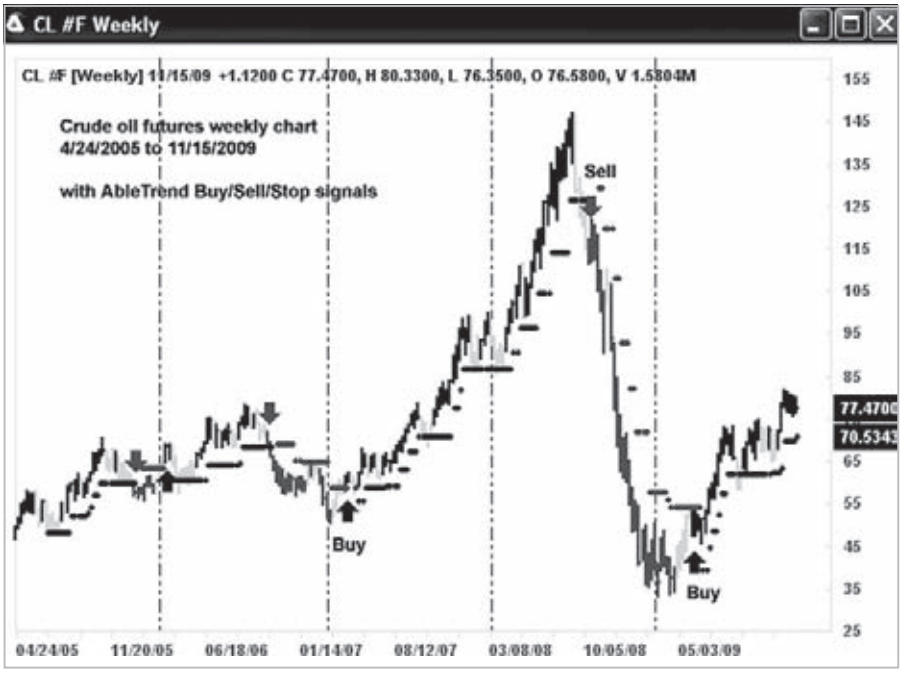


FIGURE 1.3 Crude oil futures weekly chart. Last five years, updated 11/15/2009, showing buy and sell signals given by AbleTrend.

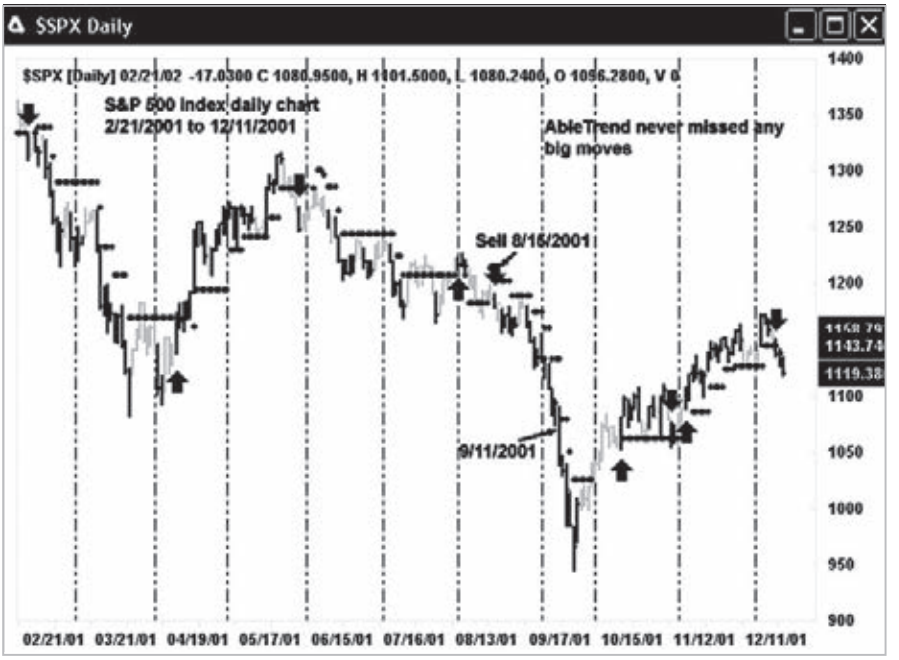


FIGURE 1.4 S&P 500 index chart in 2001. A sell signal was given one month ahead of 9/11/2001.

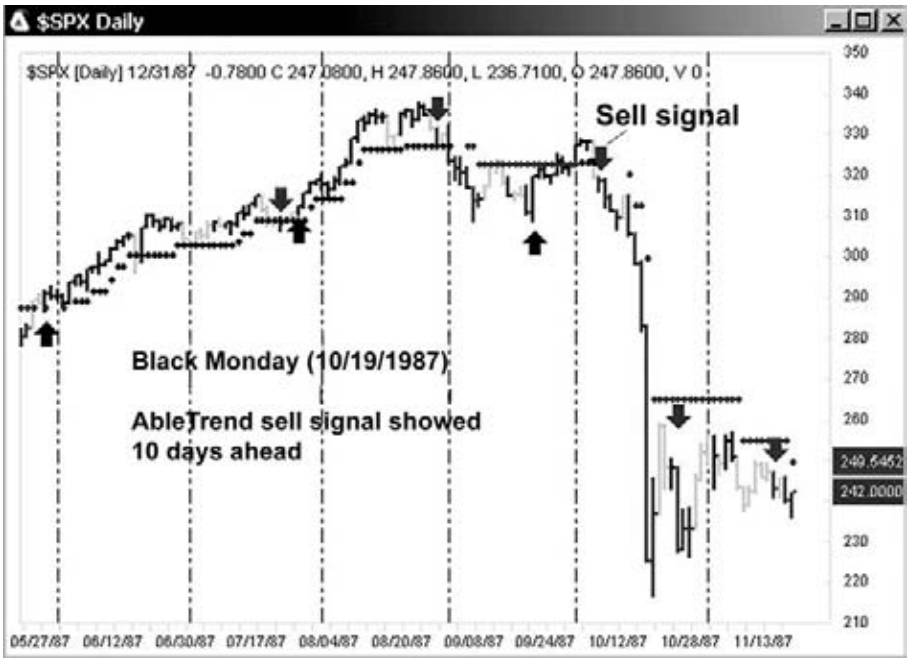


FIGURE 1.5 S&P 500 index chart in 1987. The AbleTrend sell signal came 10 days ahead of "Black Monday" (10/19/1987), the 1987 stock market crash in the United States.

From these five examples, we can see the signal accuracy of AbleTrend. This indicates that there must be a sound principle, or hidden order, behind the markets—and that AbleTrend is able to tap into it. Chapters 2 and 4 discuss this in more detail.

It's important to note the advantage of AbleTrend over *arbitrary wave analysis*, which is a popular method of analyzing charts. Wave analysis draws areas on a chart (1, 2, 3, 4, 5, . . .) that change position as market conditions change. For example, one popular wave analysis software initially marks wave "3" as a bottom. However, when the market keeps down in the next 10 bars, it removes the previous mark "3" and reassigns all the previous waves. It changes all marks on the chart to fit the facts, after the fact. How can you rely on that kind of market analysis?

By contrast, AbleTrend signals are dynamic during the formation of the bars. But once the bar closes, the signals generated by AbleTrend do *not* change. They remain the same as they were when they were first generated because the formula that created them is accurate. This means that AbleTrend signals are valuable and have practical power in real-world trading.

WHEN MY INTEREST IN TRADING BEGAN

To fully appreciate the revolutionary nature of the AbleTrend approach to trading, it would be helpful for you to understand why and how I developed it. AbleTrend did not just appear one day. It naturally evolved when a lifetime of training allowed me to take a unique perspective on a newfound interest in trading the markets.

The fact is, I have been a scientist all my life. I have tried to treat every project with scientific approaches.

I earned a B.S. from the University of Science and Technologies of China, where I studied under some of the finest scientific minds in the country. I then went on to earn my master's degree in quantum chemistry from Zhongshan University, China. Having been awarded a Regency Fellowship of the University of California (UC), I came to the United States in 1982 and earned a Ph.D. in chemistry from UC Santa Cruz in 1988.

With all my studies, my greatest interest has always been to discover the hidden structure underlying life's apparently "random" events. So perhaps it was not really an accident that led me to turn my analytical eye to one of the world's most seemingly chaotic phenomena—the financial markets.

It all started when I was working at a leading gas analyzer company in Silicon Valley, California. It was 1989, and a friend induced me to invest $10,000 in an S&P 500 futures trading pool. My friend told me that it returned 10 percent a month. He had received returns of $3,000 in the last three months and planned to invest even more. At that time, I knew nothing about trading. That's why a 10 percent return per month didn't set off any alarm bells within me that it might be too good to be true. Two months later, the Commodity Futures Trading Commission (CFTC) shut down the investment company, which was revealed to be a multimillion-dollar Ponzi scheme. I lost $7,000 of the $10,000.

This incident actually turned out to be a good thing for me. It introduced me to a whole new world—the futures and commodity trading industry. And rather than scaring me off, it triggered my scientific curiosity about trading.

A SCIENTIFIC ANTIDOTE TO ARBITRARY MARKET PREDICTIONS

For all my life I had been steeped in the world of physics. But now, thanks to my friend who had introduced me to the world of investing, my interests broadened to include financial matters. But I was still a scientist, and the more I became interested in trading the markets, the more my scientific sensibilities were offended by the arbitrary statements and predictions of the market gurus.

From TV to radio, from magazines to newspapers, from web sites to books, investment experts talk about "what the market should be doing." They say things like, "The Dow Jones index should go up 10 percent by the end of this year." Or "The target price for this stock should be $78 per share in 12 months." Or "AIG is the blue chip of blue chips; it should come back to $50 per share." Or ". . . with such bad news the market should sell down." The opinions never stop.

One recent example is the market response to the news that the Royal Bank of Scotland (RBS) had announced the largest annual loss in UK corporate history on February 26, 2009, with a total loss in 2008 amounting to 24.1 billion British pounds. According to the report, RBS was planning to put 325 billion pounds worth of toxic assets into a scheme that offers insurance for any future losses. When this terrible news hit, many experts thought RBS prices should plunge as traders would sell their stock. But RBS's stock price soared 30 percent on that day! Sellers were deeply astonished by the market behavior. In fact, there is no such thing as "should," or "would," or "could" in the trading world. What people tell you has no value. If you want to win, there is only one way to go: Act on what the market is telling you. Go in the direction that the market is going now.

Even the most celebrated gurus are not immune to arbitrary predictions. Warren Buffett bought stocks of General Electric (GE), Goldman Sachs (GS), and other stocks in October 2008. He thought it was a good time to buy. However, in March 2009, GE dropped from $22 to $7, and GS from $115 to $75. His Berkshire Hathaway stock price dropped nearly 50 percent from the top within five months. Steve Forbes predicted crude oil would come back to $30 per barrel in February of 2008. At that time oil was priced at $70 per barrel. However, in fact, oil reached $146 per barrel in July 2008. Most airlines experienced huge losses in 2008 by "hedging" (buying) crude oil futures in the second half of that year. They were not expecting what happened next: Oil prices dropped from $146 to about $35 per barrel at the end of 2008. And of course, not knowing where to turn or who to listen to, thousands and thousands of retirement plan investors lost 40 to 50 percent of their account value in 2008 as the stock market plunged.

All these facts made us see the urgency to write this book and introduce the public to a different approach to investment and trading. You see, at every key turning point of

the markets, AbleTrend provided clear market directions, buy or sell signals, and specific support and resistance levels. If more and more people knew the concepts of AbleTrend, or perhaps had access to the AbleTrend software, losses like those mentioned here could be avoided. I believe that public awareness of AbleTrend could be of benefit to many people.

FIRST STEPS: BECOMING AN EASYLANGUAGE SYSTEM DEVELOPER

The S&P 500 index futures contract was launched in 1986. Trading futures was still relatively unknown to many people in 1989, the year I first discovered the markets. But by the following year, System Writer (later called TradeStation) EasyLanguage was introduced. It was a computer program that allowed people to develop technical analysis tools such as market indicators and trading systems.

The idea of using computer technology to approach the markets appealed to me, and I decided to look into it further. With my strong background in software programming, I quickly became a certified EasyLanguage expert. At the same time, I studied many of the reputable trading books that were available, and I tested their trading ideas.

In 1990, I began reading many books about trading and took trading workshops from Larry Williams, George Angell, Larry McMillan, et al. Among those master courses, the way Larry Williams used TradeStation's EasyLanguage to write indicators and trading systems significantly impacted my approach to trading. His introduction to Money Management (MM) piqued my initial interest in this topic and was the reason why I later built MM into AbleTrend.

In 1992, I created the Spyglass trading system, which was sold through George Angell. The system was discussed in his book *Inside the Day Trading Game: Putting a Spyglass on Profits* (1994). I joined George to give workshops on the "Spyglass trading system" around the country.

During the five years from 1989 to 1994, I tested the validity of over 500 market indicators that purported to describe and predict price activity. I also created over 100 indicators of my own. Among the indicators I developed, one of them—which I now call the "AbleTrend" indicator—was, and continues to be, the most fundamental and robust. The purpose of this book is to explain and demonstrate what AbleTrend is all about.

By the early 1990s, trading the markets had become serious business to me. In 1995, my wife, Grace, and I became commodity trading advisors (CTAs) registered with the Commodities Futures Trading Commission (CFTC).

THE TREND: FOE OR FRIEND?

In the 1990s, a well-known market analyst published an article titled "The Trend Is Your Enemy: Avoiding Trading Trends." He stated that trading trends may be avoided by means of using the two moving average methods.

After my own 20 years of studying the markets, I couldn't disagree more.

It is my experience that in trading, there is nothing more important than the trend. AbleTrend is designed to mathematically identify and then follow market trends.

A human being's opinions or assumptions mean nothing to the market. The major goal of AbleTrend is to listen to the market's voice, understand its language, and make trading decisions based on actual market moves. The more arrogant we are in our opinions of what the market *should* do, the more disastrous it can be to our trading. The fact is, being humble and willing to follow the market should be a trader's first rule. Don't fight the market. It is not your enemy. If you follow it, you will find it to be your best friend. Always remember: *The trend is a trader's best friend.* No one is above the market trend. Not even the Fed, governments, international central banks, mega funds, or supertraders.

I remember in 1992 when I started to trade currency futures, the British pound was dropping like a rock. The UK central bank with many other central banks together tried to stop the trend. But they could not. One report said that the UK central bank lost one to two billion pounds per day.

From late 2008 to early 2009, the U.S. government injected over one trillion dollars into big banks and insurance companies. The U.S. Dow Jones industrial average (DJIA) index still dropped from 11,500 to 6,500 in six months, down 43 percent. Even the U.S. government couldn't stop the market trend. The market is like a wide river. Market trends are like powerful currents. The market follows its own way. No one can control it.

It's a natural law: Water always flows down from high to low. The lesson is clear: Don't go upstream. In fact, the river is not your enemy. It doesn't even know who you are. Water in the stream follows its own way and is guided by the natural laws that underlie its movement. You cannot change it and will likely pay the price for trying. But you may attune yourself with it. Go the way it's going. First understand the trend; you will then understand how to trade it.

THE FUNDAMENTAL APPROACH

One common way to trade the markets is what is called the *fundamental approach.* Fundamental traders make their trading decisions by analyzing "supply" and "demand" based on principles of economics. In order to trade, these individuals attempt to learn all the facts about current demand and available supply. To analyze a stock price, these traders seek to find out what are the P/E ratio, dividend, rate of growth in revenue and profits, company-related news, mergers and acquisitions, management changes, new products . . . even what's happening with other companies in the sector that could affect the stock's prices. Overall economics news—such as unemployment reports, GDP reports, and housing start reports—all can affect the stock's price.

However, after all these endless studies, you might still not know the "fair" price for the stock. Will the market move up or down today? What's the fair price to buy or sell?

When is the right time to buy or sell? These questions still remain. And often traders feel powerless when the market ends up moving contrary to expectations: The stock plunges even though good news has been released, or it soars even though bad news has hit the street. This is the problem with the so-called fundamental approach.

One Friday morning in 2009, the unemployment report was released at 8:30 A.M. New York time, reporting that over 500,000 jobs had been lost in the United States the previous month. It was very bad news. A trader in a big trading room was going to sell the news. Before making the trade, he asked his friend, who is a supersmart trader, "Are you selling?" His friend replied: "It seems the market is going up right now. I have to buy now." But our trader didn't listen to his friend. He was swayed by the news and sold 50 contracts of the E-mini Dow futures. Unfortunately for him, the DJIA index soared 625 points that day.

This is a true-life example of why the fundamental approach is not desirable in the real trading world.

THE DREAM OF A UNIVERSAL EARLY-TREND INDICATOR

Many of the published indicators used for predicting price movement are derivatives of a mathematical formula called the moving average. The moving average is always delayed due to the nature of averaging of values. Many traders, including myself, have concluded that these indicators cannot sustain their utility in different markets or across time. Some of these indicators may work for a limited period of time, but then they lose their effectiveness. Some of them apply only to bull markets and fail in bear markets. Some of them work only for specific futures markets, or only work for specific stock symbols, but they fail in other markets.

When I became involved in the world of trading, my work was driven by the dream that something better was possible. I was looking for something fundamentally sound. It should work under any and all market conditions. It should be universal, working in any market and for charts in any time frame: hourly, daily, weekly. In another words: If there was hidden order behind all markets—*and I strongly believed it must be so*—I wanted to find it.

I wanted to find a way that would let me hear the market telling me which direction it was going to take. I wanted to know how to pin down the formation of a trend at its earliest possible stage. I wanted to know the key support and resistance levels, and be able to recognize whether a market trend had reversed or if it was going to continue in the prevailing direction. I wanted to be able to figure out how big the risk might be before taking a trade, so that I could calculate an accurate risk/reward ratio. Emboldened by my dreams, I started my journey toward developing a better approach to market analysis.

COULD THE LAWS OF NATURAL SCIENCES ALSO GOVERN THE FINANCIAL MARKETS?

There are natural laws behind everything we observe. You may or may not understand them, but you already know these laws exist from your daily experiences. You also know that it is useless to ignore them. Why does an apple naturally drop from a tree to the ground? Why does water in a stream always flow from a high position to a low one? Why do some chemical reactions happen spontaneously, while others cannot? Why does salt dissolve in water effortlessly, but the reverse process requires the input of extra energy? All of these phenomena are so different in format that people may not recognize that they are all governed by one law—the second law of thermodynamics—called *entropy*.

As a scientist, I firmly believed that a similar law must underlie all movements of markets. And so I tested idea after idea, formula after formula. A few years passed by, and I was still testing. Then one day an idea came to my mind. Could it be that the nonlinear regression equation, which covers so many phenomena in natural science, could also apply to the stock market? As it turned out, that was the breakthrough idea I had been looking for.

THE BIRTH OF ABLETREND

One aspect of my Ph.D. studies in physical chemistry at UC Santa Cruz involved "spectral simulation," using big mainframe IBM computers. Back then, in 1986, one run of such a program on the big computers could last a few days. Over a 20-year period from the 1960s to the 1980s, the U.S. National Science Foundations funded and supported thousands of scientists to finish a huge project: numerically working through most standard mathematical computations.

On the shoulders of those scientists, I had developed a simulation program by using the huge libraries of LINPACK and EISPACK. The LINPACK, used for linear algebra computations, was developed at Argonne National Laboratories. EISPACK is another huge software library for eigensystem solutions.

The software program I developed from 1982 to 1988 during my graduate study at UC Santa Cruz, can be applied not only to molecular spectral simulations, but also to any kind of mathematical simulation. That is why I decided to use this approach as the starting point of my investigation into the financial markets. However, applying it to the stock market proved to be very complicated. I needed to simplify the process and find mathematical models to simulate the DJIA index waves.

Then, in 1994, after countless tests of different models and formulas, I hit upon one proprietary mathematical model that worked very well with the DJIA index waves. I then applied the model to other markets such as gold, wheat, T-bonds, and so on. They all showed very positive results.

The markets I studied were far different from one another, but it seemed there was a common natural law behind the movement of all the markets. Unlike any of the previous models I had tested, this approach did not have any curve-fitting setbacks. It showed the market direction as IT IS, and at an early stage. It provided the support and resistance levels that could be used for setting targets. It was also updated with every incoming tick in real time. I realized that I had just created an accurate measurement of the market—one that works for any market and any time chart. I was thrilled. I called it ASCTrend (later changing the name to AbleTrend in 2007).

Before that discovery, I had only dreamed that trading could actually become my career. But now my belief was justified that the more fundamental a natural law is, the more widely it can be applied. Applications of the fundamental laws of geometry, or Newton's laws, or the second law of thermodynamics, or quantum theory, and so on—can be seen almost everywhere in our life. I recognized that many of the natural laws that I was familiar with could be applied not only in the areas of physics and chemistry, but also to financial market trend analysis. It was so encouraging to see market behavior following the basic laws again and again.

The up-and-down price moves of gold, oil, corn, commodities, and index futures; the soaring and plunging of stock markets around the world; the exchange rates of hundreds of foreign currencies—they all appear to behave so differently that people think they must be treated specially, or differently, or individually.

However, when we ask "what is the basic law behind each market move?" we find that it is the market trend itself. But no one had ever described it before. There was no name for it yet. But now, let's call this internal market force "AbleTrend."

After creating the AbleTrend concept, I put the scientific formula to work to develop a set of indicators. As a result of these efforts, market direction and key support and resistance levels are now easily plotted out and can be presented on paper or on a computer screen for any market and any time charts. Examples presented in Figures 1.1 through 1.5 illustrate the power of AbleTrend.

AbleTrend is the result of a natural scientist applying standard methodology to develop a *science of trading*. Basically, what's really a trend? How do we define the trend scientifically? How do we follow the market trend in trading? Also, what's real support and resistance? How do we control risks and trade the support and resistance? The success of this approach in actual trading proves that fundamental natural laws can be applied not only to the natural sciences, but also can work in financial markets. As we shall see again and again throughout this book using real-life examples, applying AbleTrend to the chart of any market helps traders make buy and sell decisions that are more in line with actual (although not always obvious to the naked eye) price movement.

CHAPTER 2

Advances in Market Trend Analysis

None gave birth to one; one gave birth to two; two gave birth to three; three gave birth to the multitude of things, which attain the state of harmony when the opposite elements of Yin and Yang are mingled in a well-balanced manner.

—*Tao* by Lao-tzu

Countless books have been written on the application of classical technical analysis in the stock and futures markets. This chapter does *not* offer another recap of traditional technical analysis. Instead it offers a new, more effective way of identifying trends and future price movement based on universal principles. In the following pages we will examine together a number of critical issues related to trend analysis that I will approach from a unique perspective. By understanding and using this new perspective in actual trading, individuals can be better positioned to make wise trading decisions. Specifically, in this chapter we will look at:

- A new definition of "trend" along with directions for pinpointing the starting and ending points of a trend, and seven steps for confirming a trend.
- An explanation of objectivity, how to know one is acting on facts, and not on predictions or any other arbitrary idea.
- How to draw a more objective trendline.
- A presentation of various meanings of support and resistance (S&R), and an explanation of how AbleTrend's use of S&R differs from the traditional use of S&R.
- An exploration of the concepts of Natural S&R and Key Levels.
- How AbleTrend indicators have been developed based on new concepts.
- The four most useful indicators for trend trading selected from over 1,000 indicators that are available (less means more!).
- An introduction to a new concept: The Golden Region of Entry.

This is the most important chapter of this book. It teaches how to identify a trend and the beginning and ending points of a trend. When you are holding a position, it tells you how to confirm a trend and determine if the trend is still there or already reversed. It helps you determine where is the protection stop level, and much more. We tell you how to see all of those. Without this information, many traders cannot see or use the trend.

WHAT IS A TREND?

Before a trader can begin to understand the advantages of the AbleTrend and how to use it, it is important to understand the basics of trends and trendlines.

Among all the basic concepts of technical trading, the *trend* is the most important. Many traders have said: "The trend is your best friend," and they are correct. Experience proves that one of the common practices of traders who are profitable in the markets is that they follow the market trend, rather than trading against it. To trade successfully, traders must have a way of clearly defining and recognizing trends, especially when and where a trend begins and ends.

Practitioners of technical analysis assume that prices move in trends, and that once begun, a trend will continue for some period of time. They are concerned with identifying a price reversal at an early stage and riding it until the evidence proves that the trend has once again turned. For them, identifying the direction of the trend is the prime directive of trading; and identifying trends at their early stages, is seen as the foundation of success.

Let us begin our analysis of trends by first defining what a trend is. "Trend" refers to the general direction in which market prices are moving. It refers to something that is repeated—a continuation of events. If we know the general direction in which prices are heading, we can achieve a profit by simply "riding" the natural course of the market.

In trading, an uptrend is defined by a succession of prices that exhibit higher highs and higher lows. Figure 2.1 shows an uptrend that started with higher highs and higher

FIGURE 2.1 Example of an uptrend.

lows. A downtrend is defined by a succession of prices that exhibit lower highs and lower lows. Using these definitions, we can identify a trend on any chart. In a very good trend, the majority of price bars adhere to the definition of the prevailing trend.

This definition of a trend may seem very straightforward; however, there is more to it than is evident at first. Theoretical mathematicians may not be satisfied with these empirical definitions. They want to know the underlying "whys":

Why is it that higher highs and higher lows define an uptrend?
Why is it that lower lows and lower highs define a downtrend?
Why do these definitions of a trend work?

The theory behind this definition is actually quite complicated. From the many mathematical models I have used in my own computer simulation process, I have concluded that this definition of the trend is the best approach we have discovered so far—even though it is not actually proved as yet, and it may not ever be proved. But, for the past 15 years, applying trend concept to real-world trading and using it as the foundation for building the AbleTrend software, I have found that it works! It yields results that are easy, simple, and visual. It can be applied to any market and charts in any time frame. It works whether applied to stocks, commodities, futures, Forex, bonds, mutual funds, real estate, economic indices, or any freely traded markets around the world. It works whether it is applied to 1-minute, 5-minute, 15-minute, 30-minute, daily, or weekly charts.

To those who are not theoretical mathematicians, it may seem strange that a truth we accept intuitively may require proof, and in fact may not have ever been proved. But this is the case with some of the seemingly simplest concepts we have known and used since childhood. For example, "$1 + 1 = 2$" is a very well-known fact and the most important foundation for mathematics, especially Number Theory. We *know* it, even though it has not yet been proved by anyone in the world.

One attempt at a solution was offered by the Prussian mathematician Christian Goldbach (1690 to 1768), best known for the conjecture that every even integer > 2 is a sum of two primes, first stated in 1742. We know that $1 + 1 = 2$, and $2 = 1 + 1$ both also fit his conjecture. However, as simple as it may seem, Goldbach's conjecture remains one of the oldest unsolved problems in number theory and in all of mathematics. It has been more than 260 years, and no one in the world has proved it yet. Some mathematicians have spent their whole lives trying but have failed. As Albert Einstein said, "God does not care about our mathematical difficulties—He integrates empirically."

However, our inability to prove the truth that $1 + 1 = 2$ has not prevented us from using it in all the practical applications that have created the modern world we live in today. And the success of those applications "proves" the utility of the concept. In the same way, our inability to "prove" the meaning of a trend does not prevent us from using it in practical applications, and our back-testing results, successful virtual paper trades, and the experience of tens of thousands of traders showing positive results support our decision to simply accept the concept of the trend and put it to good use.

THE SETUP OF A TREND

Here are some basic questions we need to ask if we are to get full value from our use of trends in trading: *When does a trend start and end?*

- How do we *pinpoint* the starting point of a trend?
- How do we *pinpoint* the ending point of a trend?

We will examine each of them in turn here, and Chapter 6 presents 13 case examples that support these conclusions and illustrate other aspects of trend analysis, such as trendlines and support and resistance levels.

Starting Point of a Trend

Every trend starts with a "breakout" of a previous price pattern. Here, the breakout means a price movement through an identified level of support or resistance. We will use uptrends as examples throughout this book to illustrate concepts. For downtrends, simply reverse the same logic. The breakout always follows either a 1-2-3-4 or 1-2-3 wave pattern at the start of a trend, meaning there are two ways to start a trend:

1. **Higher low followed by a higher high, also known as a 1-2-3-4 pattern (Figure 2.2).** In this case, a higher low comes first. As soon as a new high breaks the previous high we saw at point 2, we have a higher high (point 4). It is at this specific point that the uptrend starts. The concept is very simple, but to understand it and apply it

FIGURE 2.2 Formation of an uptrend starting with a higher low. Prices form a low (point 1), then form a high (point 2), followed by a higher low (point 3), and a higher high (point 4). The uptrend started after the formation of the high at point 4. The higher low at point 5 is the confirmation of the uptrend.

FIGURE 2.3 Formation of an uptrend starting with a higher high. Prices form a low (point 1), then form a high (point 2), which breaks the previous high. This is followed by the formation of a higher low (point 3), followed by a higher high (point 4). The uptrend started after formation of the low 3. Points 4 and 5 are the confirmation of the uptrend.

to real trading, we need to look at examples. More important, we need to practice it in trading.

2. **Higher high followed by a higher low, known as a 1-2-3 pattern (Figure 2.3).** This is a rapid price reversal that starts a new trend quickly. In this case, we have a fast trend reversal. The high point "2" fast breaks the previous high, and stops the downtrend immediately. As soon as the new higher low point "3" forms, the uptrend starts from this specific point. This second way to start the uptrend is much faster than the first way described earlier.

Ending Point of a Trend

Every trend also ends with a "breakout" of previous price action:

- In an uptrend, as soon as the previous low is broken, the uptrend stops because from that point on we no longer see any higher lows.
- Conversely, in a downtrend, as soon as the previous high is broken, the downtrend stops because from that point on we no longer see any lower highs.

To summarize what we've learned so far, every trend starts with a "breakout." An uptrend starts with a breakout of a previous high. A downtrend starts with a breakout of a previous low. Every trend is also ended with a "breakout." An uptrend ends with a breakout of a previous low. A downtrend ends with a breakout of a previous high.

MATURITY OF A TREND

Here we want to zoom in on the process of trend development and see each step as a trend matures. Seven characteristics are used to identify or to confirm a trend. AbleTrend2 and AbleTrend3 are indicators placed on charts by the AbleTrend software as a tool to quickly identify and confirm a trend.

Uptrend Development

When we do not have any position yet, we are concerned about when a trend starts and when we may enter a trade. When we hold a long or a short position, we are more concerned about the trend being there or ended, continuing or reversed. Accordingly, we can decide to hold the position, or to add more positions, or to exit the positions. Analysis of maturity of a trend process will address these issues. We need to watch each step of the following seven characteristics of the uptrend development process.

Characteristics of uptrend formation include:

1. Higher high and higher low (definition).
2. Breakout of the down trendline.
3. Breakout of a previous high.
4. Breakout of AbleTrend2 or AbleTrend3 dots.
5. AbleTrend2 or AbleTrend3 dots move up.
6. Up trendline established.
7. Continuous confirmation—new higher highs and new higher lows.

Figures 2.4 through 2.9 take you through the formation of an uptrend step-by-step.

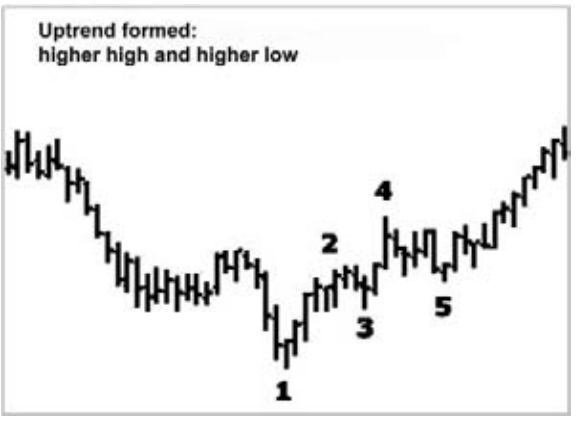


FIGURE 2.4 Why is this chart in an uptrend? We see a higher low (point 3 is higher than point 1), followed by a higher high (point 4 is higher than point 2).

FIGURE 2.5 First sign of an uptrend. Price is breaking out above the down trendline. This is normally the first alert that an uptrend is coming.

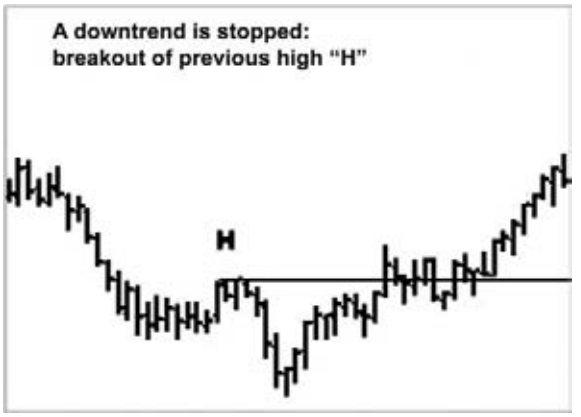


FIGURE 2.6 The "Breakout of the Previous High" is significant. The uptrend started from the breakout of the previous high (point "H"). This is an example of the "1-2-3-4" trend formation. The breakout means the previous downtrend has stopped, and a new uptrend has started.

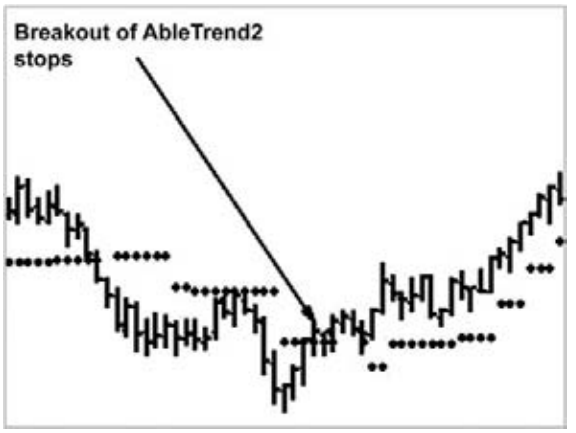


FIGURE 2.7 The breakout of the AbleTrend indicators, AbleTrend2 or AbleTrend3 stops (the dots above the bars), confirms the uptrend is underway. As the stop indicators (dots below the bars) move up, this is also confirmation of the uptrend.

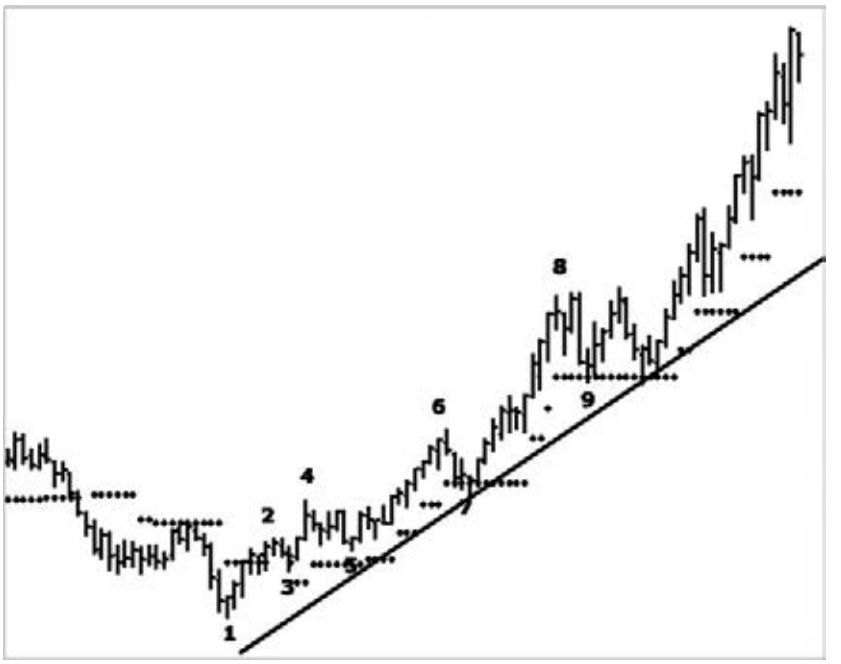


FIGURE 2.8 Up trendline is established. After the third higher low, we may draw the trendline as shown by connecting the key low points. If you can draw a trendline, and all bars are above the trendline, it is a strong confirmation of an uptrend.

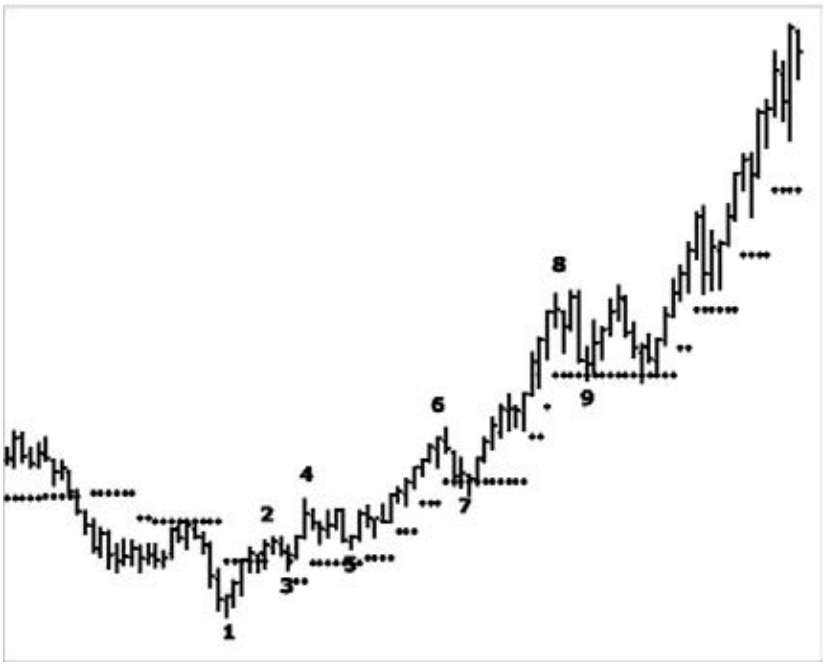


FIGURE 2.9 Continuous confirmation of the uptrend in the continuing appearance of new higher highs and new higher lows. As you can see, AbleTrend2 stops are moving up and up.

Downtrend Development

For similar reasons as the step-by-step analysis for an uptrend, here we will analyze the maturity of a downtrend, and point out for each step of the following seven characteristics of the downtrend development process.

Characteristics of a downtrend formation include:

1. Lower low and lower high (definition).
2. Breakout of the up trendline.
3. Breakout of the previous low.
4. Breakout of AbleTrend2 or AbleTrend3 stop dots.
5. AbleTrend2 or AbleTrend3 dots move down.
6. Down trendline established.
7. Continuous confirmation—new lower lows and new lower highs.

Figures 2.10 through 2.15 show the formation of a downtrend step by step.

Keep in mind that no matter which way a trend begins (with either 1-2-3-4 pattern or 1-2-3 pattern), as soon as the high or low "2" point is broken, the uptrend or downtrend has started. See Figure 2.15; mark the turning points and pinpoint the starting and ending points of the trends. Because we need a few bars on the right side of the chart to be able to state that the turning point was a high or a low, there is always a *delay* associated with the trend definition or confirmation.

FIGURE 2.10 Why is this chart a downtrend? We see the formation of lower highs and lower lows. In this case we see a 1-2-3 formation into a downtrend. First, price action formed a lower low (point 2, which was a quick breakout of the previous low). Then after point 3 (a high) formed, the downtrend began.

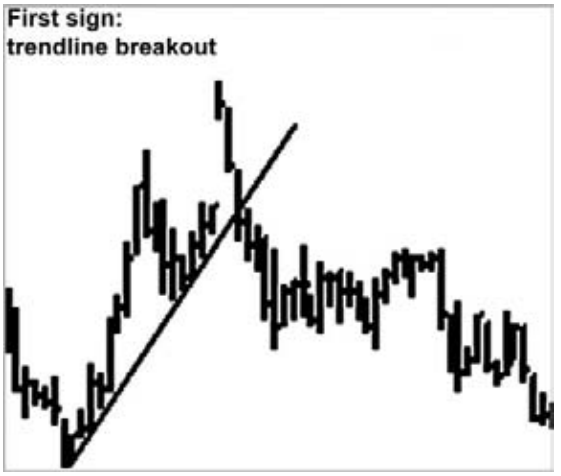


FIGURE 2.11 First sign of a downtrend forming: the breakout of the up trendline. This is normally the first alert that a downtrend is coming.

FIGURE 2.12 "Breakout of the Previous Low" (marked as "L"). The previous uptrend is stopped (we see no more higher lows), and a downtrend has started from a lower high.

FIGURE 2.13 The breakout of the AbleTrend indicators, AbleTrend2 or AbleTrend3 Stops (the dots below bars), confirms that a downtrend is underway. AbleTrend stops (the dots above the bars) moving down also confirm the downtrend.

FIGURE 2.14 The down trendline is established. It is confirmation of a downtrend. There are many ways to draw trendlines. We will shortly have a more in-depth discussion of how to draw trendlines.

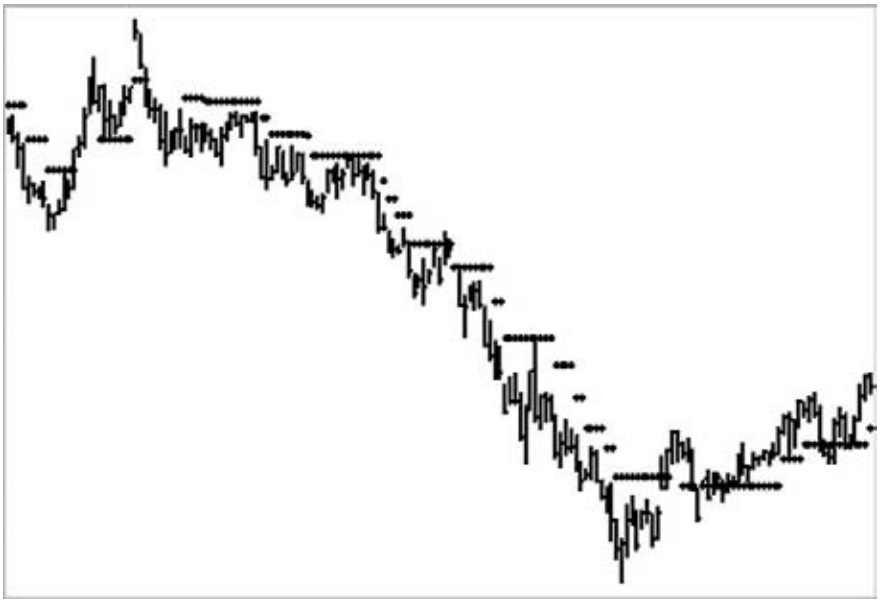


FIGURE 2.15 Continuous confirmation of the downtrend by the continuing appearance of lower lows and lower highs. We also see the AbleTrend2 stops (the dots above the bars) moving down and down.

FIGURE 2.16 Trend analysis. No matter which way a trend begins (1-2-3-4 or 1-2-3), as soon as the high or low "2" point is broken, the new uptrend or downtrend has started. We may continue to mark the tops and bottoms along the trend until the trend reversed. After point "16," we see a higher high formed, and the downtrend stopped.

Figure 2.16 is an exercise for you, too. Please mark on the chart: When was the uptrend ended? When did the downtrend start? How do you confirm this downtrend along the way? And at what point did the downtrend end?

Based on the trend definition, we marked each top and bottom with 1, 2, 3, and so forth, on the chart in Figure 2.16. In most cases, the market can be well defined and we know specifically at what point the market downtrend started, at what point the downtrend stopped, at what point the market uptrend started, and at what point the uptrend stopped.

DRAWING TRENDLINES

How many ways are there to draw a trendline on a chart?

Among the seven confirmations for a trend, the breakout of the trendline is the first sign (or step) of a new trend starting. This is why it is one of the most common signals used in technical analysis. It has the least delay of any of the methods used to identify trends. However, while a trendline is easy to talk about, it is difficult to draw accurately in real time. People do not always draw the exact same trendline on the same chart. For

one thing, they each have their own time frame in mind. Some people look for short-term trends, while others look for mid-term or long-term trends.

Trendlines are covered in the first chapter of Tom DeMark's book *The New Science of Technical Analysis*. According to DeMark, "It is surprising how dissimilar they are in construction and interpretation, and how subjectively they are applied." He goes on to say, "Not all the trendlines can be correct—only one is."

It takes two points to define a straight line. The question is: Which two critical points should be used to draw a proper trendline?

The common way to draw a trendline is:

1. For an up trendline: Draw a line connecting two recent lows.
2. For a down trendline: Draw a line connecting two recent highs.

But which two recent lows or highs should be selected? Some people see a smaller picture; others see a bigger picture. This is why two people often cannot agree on which two points should be used to draw a trendline. Figure 2.17 shows the classical way to draw trendlines.

Figure 2.18 shows that for the same chart, there are many ways to draw trendlines at the same time. It all depends on what time frame you have in mind: short-term, mid-term, or long-term. There is no right or wrong. It is drawn according to your trading purpose.

FIGURE 2.17 A trendline is a line drawn across the highs or lows of a market, wherever you can observe a relatively straight line of price action. For instance, in a bull market, you can draw an ascending trendline connecting the lowest prices reached each day. This straight line is used as support. In a bear market, you can draw a line across the highs and use this descending trendline as resistance. It is always important to identify which time frame your trendline belongs in.

FIGURE 2.18 There are many ways to draw trendlines. A short-term trendline connects short-term highs or lows. A long-term trendline connects long-term highs or lows. Depending on their time frame, people might draw different trendlines on the same chart, as illustrated here.

Then, what are the critical points that should be used to define a trendline?

We suggest the following steps for drawing an accurate trendline, which is made possible by using the AbleTrend software. To see how it looks when applied, refer to Figure 2.19:

1. Draw a horizontal line passing the key top or bottom. In our example, drawing this horizontal line produces line AC.
2. Next, we use the T2 dots to draw a trendline, by connecting two T2 dots to form a line. The first dot is easy to choose; it is the current T2 dot. We use the degree of support/resistance distribution to determine the second. Notice on the chart that some T2 dots stand alone, while others are part of a longer series of dots. The number of dots in succession at the same price level is called the degree. It is easy to visually determine which level of T2 has the greatest degree, and thus where the key support and resistance exists on the chart. Connecting the last T2 dot in the key support or resistance with the current T2 dot draws the trendline. This is done in the example to draw line BC—a down trendline.
3. Point C is where the trendline intersects with the horizontal line from the top or bottom. When the trend changes, you may begin a new trendline from this point. Since you have selected the point C, next you only select another point for the up trendline. We select a high degree T2 dot as the second point. This is done in the example drawing the line CD.

Using these guidelines, we reduce variation in drawing trendlines; our choices for drawing a trendline are much reduced to a very small region of the chart. The advantage of this method is that the dots we use to draw the trendline are defined by the price action in the market itself, and not by any subjective view that traders may have.

Under ideal market conditions, the up trendline, down trendline, and top line or bottom line will cross one another. This should give a hint as to where the proper trendlines should be drawn. Since AbleTrend2 dots are at key points of support and resistance, the more such dots line up at the same level, the stronger the support/resistance is. This is why it is so much more accurate to use the stronger AbleTrend2 dots as our guide to draw trendlines.

As an example, look at Figure 2.19, the GBP/USD 120-minute chart. First draw the key support level by connecting the bottoms (line AC). Then draw the down trendline with two AbleTrend2 dots (line BC). Under ideal conditions, the new up trendline that

FIGURE 2.19 GBP/USD 120-minute chart. First draw the key support level by connecting the bottoms (bottom line AC). Then draw the down trendline by using the two strongest AbleTrend2 dots (line BC). Under ideal conditions, the following up trendline should cross both the bottom level line and the down trendline (point C—for "crossing"). We now may draw a proper up trendline (line CD).

will define the following price activity will intersect both the bottom level line and the previous down trendline at point C (which stands for "crossing"). We may use the crossing point "C" of the bottom line and the down trendline as the first point, and then draw a proper up trendline (line CD).

Look back at Figure 2.19, then look at Figure 2.20, and you will see that the top line and the previous up trendline were also magically crossed with the down trendline BC.

Figure 2.20 is an ideal example. In the real trading world, we may see some deviation most of the time. Our method of drawing trendlines usually gives us a hint at what the ideal trendlines should be. It has one critical point decided in many cases, and we only need to look for another critical point.

The principle behind this remarkable phenomenon is "symmetry" of the world, just as that seen in many mineral crystals. When the crystal grows, it follows the pattern of its characteristic symmetry. In the same way, price movement follows certain universal principles of symmetry that we try to describe as closely as possible with our AbleTrend formulas.

FIGURE 2.20 Ideal trendlines examples for GBP/USD 120-minute chart, 5/15/2009 to 6/11/2009. It shows how to draw trendlines with top or bottom lines, and how to use the strongest T2 dots to help draw trendlines.

SUPPORT AND RESISTANCE

The concepts of support and resistance are undoubtedly two of the most highly discussed attributes of technical analysis. They refer to price levels on charts that tend to act as barriers that prevent the price from pushing through in a certain direction.

What is the single most important piece of information in terms of technical analysis? It is the price.

The price is what the market is directly telling you. There is no delay. The market tells us what the reasonable price is at any moment.

What is the single most important piece of information in terms of the market price? The answer: support and resistance levels.

Based on its most recent prices, a market defines its own support and resistance levels. These levels are not based on anything you or anyone else may think about a market. These levels are the overall result of all market forces, actions, and interactions. Knowing this, it should be clear why all of your trading decisions from this day forward should be based on where areas of support and resistance can be identified that are defined by the market itself. Support and resistance levels can define themselves in many forms, including trendlines, previous highs or lows, or a percentage retracement.

Support

As the term implies, "support" is the price level at which a declining or bear market stops going down. Think of support as a price floor that prevents the price of a market from being pushed further downward. As a market approaches support, it tests its support level. If prices reach a support level and stop, then that may indicate there is buying strength in the market. If, however, prices breach a proven support level, that usually indicates continued weakness in the market.

The ability to identify a level of support can coincide with a good buying opportunity because this is generally the area where market participants see good value, begin buying, and therefore start to push prices higher again.

Resistance

The term "resistance" also gives us a suggestion into its meaning when it comes to chart analysis. Resistance is a price ceiling. Think of resistance as a price ceiling that prevents the price of a market from being pushed further upward. A market moving up, or a bull market, must show increased strength when confronted with a resistance level if it is to break through, or else it may burn out and fall back.

For example, in stock trading, at times it may seem impossible for traders to push the price of a stock above a certain level. Something appears to be resisting the upward movement of the price. Resistance levels are regarded as a ceiling because there seems to be a barrier at these price levels that prevents the market from moving prices upward.

As an illustration, assume that a trader (we'll call him Joe) was holding a position in WAL MART (symbol: WMT) stock between February and March 2009, and that he was expecting the value of the shares to increase. Let's imagine that Joe notices that the price has failed to get above $51 several times over the past two months, even though it has gotten very close to moving above it. In this case, Joe would see the price level near $51 as a level of resistance.

We will discuss a number of different ways to identify support and resistance levels next.

THE MARKET DEFINES SUPPORT AND RESISTANCE

New traders might think that identifying these support/resistance levels is easy. But in fact, support and resistance can come in various forms. Real and false signals are mixed. As a result, identifying support/resistance is much more difficult to master than it first appears.

Among the more common forms in which support and resistance levels present themselves are trendlines, round numbers, moving averages, percentage retracements, or a previous significant high or low on the chart. In this book, we don't use any of these. We mainly use AbleTrend2 (T2) stops as support and resistance levels in our applications and examples. However, it will be valuable to the reader's understanding to examine these other manifestations of support and resistance in more detail.

HOW COMMON METHODS DEFINE SUPPORT/RESISTANCE LEVELS

Here are the common methods suggested by other books: trendlines, round numbers, moving averages, and Fibonacci retracements.

Trendlines

Using trendlines as support and resistance levels is a common practice. Technical analysts can find trendlines on any chart. However, just as defining a trendline is easy to describe, but hard to do, so using trendlines to define support/resistance is easier to describe than accomplish. Each trend time frame may have its own support and resistance levels. For example in Figure 2.21, we may use long-term, mid-term, or short-term trendlines as support or resistance.

The short-term trend may have developed its own support and resistance levels that may or may not be recognized by, or material to, the longer-term trends.

FIGURE 2.21 Example of trendlines serving as support (line S, short-term trendline) or resistance (line L, long-term, and line M, Mid-term, trendline). People may draw long-term, mid-term, or short-term trendlines on the same chart, representing support or resistance for the corresponding time frame.

Round Numbers

You often will hear financial analysts on TV talking about gold at $1,000 per ounce, or oil at $70 per barrel. Why do they rarely talk about $996.75 for gold or $70.35 for oil?

The fact is that sometimes prices may actually have a difficult time moving beyond a round price level such as $70. Many inexperienced traders tend to buy/sell the market when the price is at a whole number because they are more likely to feel that a stock is fairly valued at such levels. Also, most target prices/stop orders set by either retail traders or large investment firms are placed at round price levels rather than at prices such as $70.35. Because so many orders are placed at the same level, these round numbers tend to act as strong price barriers. This is why reports on CNBC TV often refer to the Dow being at 10,000 or 7,000, for instance, and why we need to watch the round numbers when looking for areas of support and resistance.

Moving Average Line

A moving average is an average of prices that is calculated within a specified period of time, for example, 10 days. As the data from each new day is added to the calculation, the data from the oldest day drops out. Because of this the average "moves" with the market as we move forward in time. Short-term support or resistance uses the 10-day

moving average, mid-term uses the 50-day moving average, and long-term uses the 200-day moving average. Of course, you may choose any number for moving average, but those mentioned here are commonly used by professional traders, so you should, too.

Fibonacci Retracement

The Fibonacci sequence was named after its Italian founder, Leonardo Fibonacci, born around A.D. 1175. Each term in this sequence is simply the sum of the two preceding terms (1, 1, 2, 3, 5, 8, 13, 21, 34, and so on).

This sequence in itself is not all that important; rather, it is the quotient of the adjacent terms that possesses an amazing proportion, roughly 1.618, or amazingly, its inverse, 0.618.

When I was in high school I learned that the number 0.618 is a "magic" number.

Either 1.618 or 0.618 is called the "golden ratio," "a fundamental function for the building blocks of nature." Mathematicians have discovered evidence of the golden ratio throughout the universe. For example, the structure of some parts of the bodies of honeybees, sunflowers, and even human beings seems to be built on the basis of the golden ratio. This makes some people believe it should have significance in trading or finance as well. You should beware of this application, however, because there are many more cases that do not follow the golden ratio than do. This also means the Fibonacci ratio will fail in most cases to provide valuable information.

Those who do see value in using the Fibonacci ratio for analyzing price data use the "percentage retracement," which mainly refers to defining points of support and resistance using the key Fibonacci ratios of 23.6 percent, 38.2 percent, 50 percent, 61.8 percent, 76.4 percent, and 100 percent.

Numerous books and articles talk about Fibonacci Retracements, Fibonacci Arcs, Fibonacci Fans, and Fibonacci Time Zones. Among these, only the Fibonacci Retracement is built into the AbleTrend software as a quick checking reference.

HOW ABLETREND DEFINES SUPPORT AND RESISTANCE LEVELS

While trendlines, round numbers, moving averages, and Fibonacci Retracements are common means of determining support and resistance, the AbleTrend software primarily uses the following four methods to determine support and resistance levels:

1. Tops or bottoms.
2. AbleTrend2 (T2) stops.
3. Moving average.
4. First-hour trading range for day trading; or one-month trading range for daily charts.

The following is a discussion of these four topics.

Tops and Bottoms

A top is the highest high price point during a specified period. A bottom is the lowest low price point during a specified period. Each top or bottom represents an equilibrium point of the market forces. The opposite forces should be equal at that point, causing prices to cease moving up or down. Then one force becomes stronger and the trend takes off in the opposite direction.

To identify a top or bottom, the best way is using your eyes. For a top, you must first see a few bars preceding and following that are lower than the top point. We cannot assume a point is a top until the market tells us. Therefore, there is always a time delay in confirming a top. The same is true for identifying a bottom. The number of bars of delay is called *Strength*. Normally a strength of 3 or more bars is required to define a top or bottom. For example, if we use a strength 3, it means that to identify a top, we need to see 3 previous bars that are lower than the top, and 3 bars after the high that are lower than the top. The more strength we see, the stronger the support or resistance level the top or bottom represents.

Some people believe they can predict a market top or bottom. They belong to a "this is what the market should do" group. In fact, no one can predict a market's top or bottom. Tops and bottoms are defined by the market itself. They are the result of all the forces operating at the equilibrium points. Buy pressure and sell pressure are equal at the top or bottom points. Then the forces shift and the trend takes a new direction. Using trend-following methods, there is no way to predict the top or bottom, and when the shift will occur.

Once more, the trend-following method defines an uptrend as higher highs and higher lows; a downtrend is defined as lower highs and lower lows. The market movement itself defines these points. *Therefore, the trend-following method cannot predict market tops or bottoms at all.* Many other methods, referred to as count-trend methods, try to predict market tops and bottoms. All these methods are based on people's theories, assumptions, or arbitrary ideas. However, the market has its own way, never following someone's theories, assumptions, or arbitrary ideas. These top and bottom methods have never worked in the past, do not work now, nor will they work in the future. The fact is, if we want to succeed in trading, we must follow the market trend as defined by the market itself.

Previous Major Highs and Lows as Support and Resistance The last major high, or the all-time highest price for a market, can sometimes be a strong psychological resistance level. An important low can be a similarly strong support level. I use these only when the market has no other support or resistance level in sight, because it is at an all-time, or an extreme high or low. When the market is at an unusually high or low level, it has usually broken all its previous support or resistance levels and, therefore, there are no other levels to use but the previous high or low price.

Natural Support and Resistance Natural support and resistance refers to those levels drawn by using recent previous tops or bottoms as support and resistance.

FIGURE 2.22 A rally off a bottom—natural resistance. After a new "low," the previous "top" becomes natural resistance. If the market can break above a few recent tops (resistance levels) in a relatively short time, the market may have enough force to keep going up. The previous resistance levels are marked as R1, R2, R3, and so on. When you see a market quickly break out above a few resistance levels, it means that a big uptrend is on its way.

Remember there must be big forces balancing to form a top or bottom. The up and down forces must be equal to form those tops or bottoms.

If, during a very short period of time, you see market prices consecutively break out of two or three recent natural support or resistance levels (see Figures 2.22 and 2.23), it normally indicates that a big force is on its way that will push the trend forward. Big moves normally follow such breakouts.

FIGURE 2.23 Descent from a top—natural support. After a new "high," the previous "bottom" becomes natural support. If the market can break below a few recent bottoms (support levels) in a relatively short time, the market may have enough force inside to keep going down. The previous support levels are marked as S1, S2, S3, and so on. When you see a market quickly break out below a few support levels, it means that a big downtrend is on its way.

FIGURE 2.24 Nice uptrend on right side—continues breaking out of the previous resistance lines—R1, R2, R3. . . . Also, most bars have higher highs and higher lows than the previous bar. The bar lows are well above the EMA line. Be alert for a good uptrend.

What's a "very good trend"? It's when the majority of bars follow the trend definition. For example, you may see Figure 2.24 and 2.25, sometimes for an uptrend; each bar follows higher highs and higher lows, and for downtrend, each bar follows lower lows and lower highs.

The opposite of trending is choppy. We will talk about this more, and provide methods of identification in Chapter 5.

Key Levels as Support and Resistance Key levels are *long-term* support and resistance. What is considered long term is based on what time interval is being traded, for example, for a 30-minute chart, a daily chart would be long term. Short-, Intermediate-,

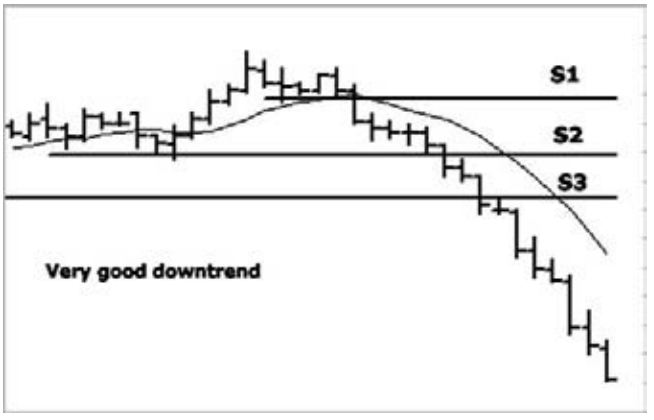


FIGURE 2.25 Nice downtrend on the right side—continues breaking out of previous support levels—S1, S2, S3. . . . Also, most bars have lower highs and lower lows than the previous bar. The bar highs are well below the EMA line. Be alert for a good downtrend.

and Long-term Trend perspectives are varied from person to person, such as seen in the example in Figure 2.21.

In this book, key levels are defined by AbleTrend2 (T2) stop dots: the dots below bars are key support levels for the bars; the dots above bars are key resistance levels for the bars. T2 dots are updated in real time with every coming tick. The T2 dots have two meanings: (1) If they appear under the bars, it indicates the market is in an uptrend; if they appear above the bars, it indicates the market is in a downtrend. (2) The value of T2 below the bar is the key support level, and the value of T2 above the bar is the key resistance level. See Figure 2.26 for examples; KR means key resistance, and KS, key support.

Based on Figure 2.26, here's a six-step exercise to help you better understand the chart:

1. Mark where the trends started.
2. Along the course of the uptrend or downtrend, could you see any point of violation of the trend definition?
3. Where were *natural* support and resistance?

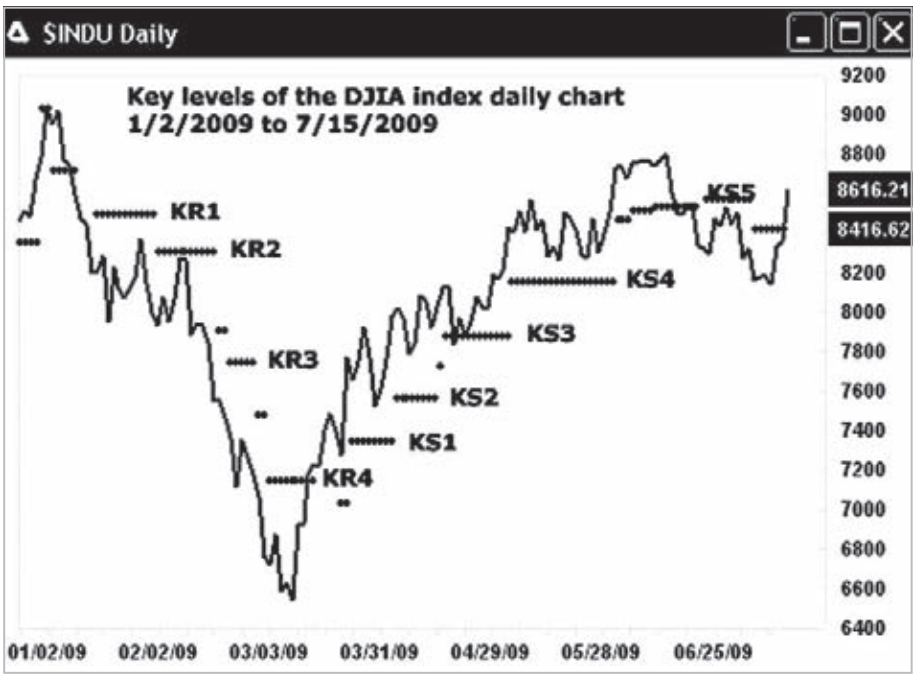


FIGURE 2.26 Example—Trend Analysis of DJIA Index daily charts. This chart uses "bar on close" line. AbleTrend2 indicator with default settings is added. The key support levels are marked by lines of the T2 dots as KS1, KS2, KS3, and so on. The key resistance levels are marked by lines of the T2 dots as KR1, KR2, KR3, and so on. Among the T2 dots, only one T2 dot was a false hit in six months.

4. Where were *key* support and resistance levels?
5. What do you think would have been good entry and exit points?
6. Where would you have placed your stops if you had held a long or short position?

AbleTrend2 (T2) Stops

AbleTrend2 (T2) is a key innovation of AbleSys that detects major support or resistance. Our users say that they value the T2 the most, never trading against it. For that reason, T2 is a critical topic that is discussed throughout this book. You will find especially useful information on AbleTrend indicators in the following section of this chapter.

Moving Average

We use moving average line as support or resistance in our Simplified Trading Method (STM; see Chapter 5). For more details on exponential moving average (EMA) see the section titled Other Technical Trend Indicators, later in this chapter.

Trading Range

First-hour trading range is commonly support or resistance for day trading. One-month trading range is commonly support or resistance for daily charts. Professional traders watch such price levels. We don't emphasize this, but just be aware of such support and resistance levels, plot the lines for such ranges, and pay attention to them when the price is close to those levels.

ABLETREND INDICATORS

An indicator is a kind of analysis technique that can be applied to charts, revealing trends, support and resistance, trend changes, and so on. An indicator gives buy, sell, stop, or exit signals based on the trading rules that create it. AbleTrend software uses our own proprietary AbleTrend indicators, along with a few popular indicators to help traders make trading decisions.

There are other market analysis products available that provide users with 10 to 50 indicators to choose from. These products can only make trading decisions more difficult. J. Welles Wilder Jr. mentioned in his book (New Concepts in Technical Trading Systems, 1978) that one of the greatest traders of modern times said, "There is really a lot less to trading than meets the eye." Trying to incorporate too many ideas into one's trading just leads to confusion and an inconsistent approach to the markets. Instead, one should master the ability to focus only on essential factors. AbleTrend has been designed to do this for traders. AbleTrend provides indicators that address the two most essential elements that a trader really needs: trend direction and stop placement. AbleTrend1 reveals the market direction by applying color bars to a chart. AbleTrend2 and AbleTrend3

suggest optimal stop placement as well as market direction by applying blue dots and red dots. AbleTrendSig automatically pinpoints the best buy or sell bonus signals.

In trading, do you really keep tracking a trend as higher highs and higher lows? Or where key support or resistance is found? Of course not. We have the help of modern computers and AbleTrend software. The goal of the AbleTrend design is threefold: (1) indication of market trends; (2) optimal protection stops where positions prove to be wrong; (3) optimal entry points.

AbleTrend is NOT a prediction or forecast for a market. It is an *observation* of market trends, a *picture* of market actions that you can visually see, a *language* that the market is speaking that you can easily understand. It tries to become a *mirror* of the markets.

AbleTrend is proprietary, not shareware, and therefore the specific formulas of AbleTrend will not be disclosed. The technical principles of AbleTrend are based on our new concepts of trend, natural and key support and resistance, trendlines, and so on, described earlier in this chapter; and the philosophy of AbleTrend is presented in Chapter 4. The major function of AbleTrend is accurately displaying as objectively as possible what the market is saying about itself at that moment. There is no prediction or forecast at all. It says that the trend is up or down, it tells where key support or resistance is, and it indicates the optimal entry point.

AbleTrend only knows the past and now. It cannot know the prices of the future—how high or how low the market will go, or the top or bottom in the future, or when and where it will reverse. All that information is found in our daydreams. *AbleTrend is formed from facts and remains based in facts*.

Simplify, simplify, simplify. This is the action of AbleTrend. While some individuals like to make simple things complicated, we like to make complicated things simpler. The new mechanical and automatic AbleTrend trading system combines all trading signals and strategies into one, and only one, buy/sell signal to follow. It is designed to be fundamental, focused, flexible, fast, and friendly, which we call the "Five Fs," as explained in Chapter 5. It provides an exponential rise in power, yet it is easy to learn and use.

AbleTrend1 (T1)

AbleTrend1 (T1) is the *market "direction" indicator*. It shows trend direction by colors. When the market changes to or stays in an uptrend, the bars become or remain BLUE. When the market changes to or stays in a downtrend, the bars become or remain RED. When the market goes sideways or is not strong on either side, the bars become or remain GREEN. Blue bars mean there is an uptrend and red bars mean there is a downtrend. The T1 indicator can work with any time bar charts.

Users can adjust the "RISK" level of AbleTrend1 from 1 to 10, depending on their preference. "1" is the most sensitive risk level with minimum delay, and "10" is the least sensitive. The default value of RISK is 8. Under normal conditions, the default setting should be a user's first choice. Of course, you may use RISK higher than 10.

The use of the RISK level is further discussed in our Simplified Trading Method, which is covered in Chapter 5.

AbleTrend2 (T2) and AbleTrend3 (T3)

AbleTrend2 (T2) and AbleTrend3 (T3) are *trend-stop indicators*. They provide two layers of meaning:

1. Dots appearing below the bars indicate that the market is in an *uptrend*; dots appearing above the bars indicate that the market is in a *downtrend*.
2. The value of the dots indicates the *key support or resistance* level for the corresponding bar at that time. These dots are used as *stops*.

Both AbleTrend2 and AbleTrend3 must identify a trend before they can begin to paint the dots. This is why people may sometimes not see any dots on a chart. At those times the direction of the trend is not clear.

An Alternative to T2 If you don't have the AbleTrend trading software, you can use an alternative method to decide where to place stops. Natural support and resistance refers to those levels drawn by using recent previous tops or bottoms as support and resistance. Therefore, you may use a level that is a few points below the natural support while being in a long position. When the market moves up, we call the distance between the last price and the most recent previous low as the RANGE. The stop value can be about half of the RANGE below the last price. If you hold a long position, the protection stop for the current bar can only be equal to or greater than the stop of the last bar. Never move stops backward.

The logic for short positions is reversed from the long side. You may use a level that is a few points above the natural resistance level while being in a short position. When the market moves down, we call the distance between the last price and the most recent previous high the RANGE. The stop value can be about half of the RANGE above the last price. If you hold a short position, the protection stop for the current bar can only be equal to or less than the stop of the last bar. Please note, the alternative stops determined as just described are not the T2 stops.

Usage of T2 and T3 T2 can be used in several ways to help traders make decisions:

- It identifies and continues to confirm *trends*. Breaking out of the T2 indicates a previous trend has stopped. Moving up or down of the T2 dots indicates confirmation of the current trend.
- T2 provides a quick way to spot *support and resistance* levels. It is updated in real time. We may make a decision based on the T2 levels for pullback or reversal of a trend.
- It can be used for the placement of protective stops or profit target stops (if the position has a profit). It is used in our Simplified Trading Method, discussed in Chapter 5.

Many studies reveal that it is more difficult to know when to exit the market than to enter the market. The fact is, one can get into the market at any time if one knows how to get out of the market. AbleTrend2 and AbleTrend3 are trend-stop indicators that are precisely and objectively defined by the market's own prices. They help traders enter and stay in the right market direction with minimal risk—and then exit the market at the correct time. Traders can back-test these trend stops with the historical data.

AbleTrend2 and AbleTrend3 work in very similar ways, but the trend definition and stop calculations are different. AbleTrend3 is about 50 percent more sensitive than AbleTrend2. AbleTrend3 is best used to enter the market; AbleTrend2 is best used to place trailing stops.

The beauty of AbleTrend stops is that the stops change along with the market. The stop values are determined objectively by the market's price feedback. When users enter the market, the stops will continuously adjust and indicate optimal stop placement, guiding them to lock in their profit, and to approach maximum profits step by step.

AbleTrendSig (TSig)

AbleTrendSig (TSig) is a *semi-system indicator* that integrates the time-proven AbleTrend trading rules and generates buy or sell signals.

TSig will provide a buy signal with a big blue dot below the bar when buy conditions are met. The value of the big blue dot is the initial stop for the position. TSig will provide a sell signal with a big red dot above the bar when sell conditions are met. The value of the big red dot is the initial stop for the position.

TSig is a "*Bonus*" trend indicator. It provides more optimal entry points along the way of a trend. It has three major functions:

1. It can be used as initial entry points and the TSig value can be used for placement of an initial stop.
2. It provides confirmation of the trend. When the TSig dots show up, you know the trend is still there and continuing.
3. It provides an optimal point to add to positions, or enter a trade if the initial buy or sell entry point was missed.

OTHER TREND-FOLLOWING INDICATORS

We will now discuss some of the other technical trend-following indicators that are commonly used by traders. I have provided some quite technical information on these, such as how they are calculated. I provide this only for readers who are mathematically inclined or who have an interest in understanding the "nuts and bolts" of these models.

Do not be concerned if you are not interested in getting into so much detail, or if it seems difficult to understand. You will not need to know the "how" of these indicators either to understand the rest of this book, or to use the AbleTrend software.

How many indicators are there? There are over 200, including ShowMe, PaintBar, and others in TradeStation software alone. Plus we estimate there are more than 1,000 third-party indicators. Which indicators should you use from over 1,000 choices?

Here, less means more. Built in to the AbleTrend software are just six trend-related indicators: moving average, exponential moving average, weighted moving average, MACD, ADX, and STARC bands. If we use only exponential moving average (EMA), then there are only *four* other trend-following indicators in AbleTrend.

Among technical analysts, the moving average is the most widely used indicator for trend-following methods. In statistics, a moving average is also called a rolling average, rolling mean, or running average. It is a type of finite impulse response filter used to analyze a set of data points by creating a series of averages of different subsets of the full data set. There are more than six types of moving average in statistics. We only include and discuss these three types of moving averages: simple moving average, weighted moving average, and exponential moving average.

Moving Average (MA)

A simple moving average (MA) is a price average calculated over a specified period of time. For example, a 10-bar moving average includes the last 10 bars of a price value in its calculation. The Moving Average indicator in AbleTrend software is calculated by using the Close price of each price bar. The MA is one of most commonly used *equal weighted* trend-following indicators.

Calculations

$$MA = (C_0 + C_1 + C_2 + \cdots + C_{N-1})/N$$

where MA is value of moving average
$C_0, C_1, C_2, \cdots, C_{N-1}$ are close prices of last N days (bars)
N is length to average

Default Parameters

Default value of length is 10.

Weighted Moving Average (WMA)

The weighted moving average (WMA) indicator calculates and plots a weighted average of prices, specified by the price input, from each of the most recent number of bars specified by the length input. This method of calculating a moving average gives greater weight to the market's most recent price and a reduced weighting to older prices.

A simple MA gives equal weight to all of the prices in the series. But WMA gives *linear decreasing weight* for each price from highest weight for the most recent data points, down to 1.

Calculations

$$\mathrm{WMA} = [\mathrm{NC}_0 + (\mathrm{N}-1)\mathrm{C}_1 + (\mathrm{N}-2)\mathrm{C}_2 + \cdots + \mathrm{C}_{\mathrm{N}-1}]/[\mathrm{N} + (\mathrm{N}-1) + (\mathrm{N}-2) + \cdots + 1]$$

where WMA is value of weighted moving average
N is length to average
$\mathrm{C_n}$ is close price of the n – bar ago

Weights of each bar from the last bar are N, N – 1, N – 2, . . . and 1 in linear decreasing manner. Many books use complicated math expressions. I use the simple formula shown here to show the meanings of the weights.

Default Parameters

Default value of Length is 10.

Exponential Moving Average (EMA)

An exponential moving average (EMA), also called an exponentially weighted moving average (EWMA), applies weighting factors that decrease exponentially. The weighting for each older data point *decreases exponentially*, giving much more importance to recent observations while still not discarding older observations entirely. The following graph shows an example of the weight decrease.

This method of calculating a moving average gives greater weight to the market's most recent price and a reduced weighting to older prices non-linearly.

Calculations

$$\mathrm{EMA} = \alpha[\mathrm{C}_0 + (1-\alpha)\mathrm{C}_1 + (1-\alpha)^2\mathrm{C}_2 + (1-\alpha)^3\mathrm{C}_3 + \cdots + (1-\alpha)^{\mathrm{N}-1}\mathrm{C}_{\mathrm{N}-1}]$$

where EMA is value of exponential moving average
$\mathrm{C_n}$ is close price of the n – bar ago
N is length to average
α is a typical exponential percentage, i.e., $\alpha = 2 / (\mathrm{N}+1)$

Weights of each bar from the last bar decrease exponentially (an extremely fast way): α, $(1-\alpha)$, $(1-\alpha)^2$, $(1-\alpha)^3$, . . . and so on. Many books use complicated math expressions. I use the simple formula shown here to show the meanings of the weights.

Default Parameters

Default value of length is 10.

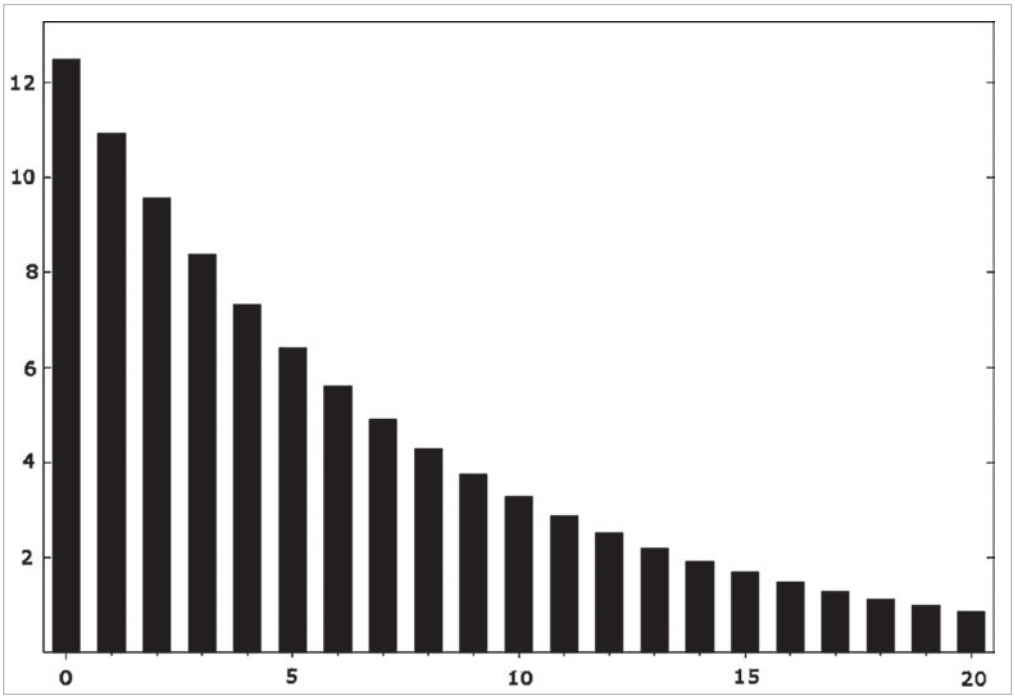


FIGURE 2.27 Example of the EMA weights decreasing exponentially.

Usage The three types of moving average described earlier are generally used for trend identification. Attention is given to the direction in which the average is moving and to the relative position of prices and the moving average. Rising moving average values (direction) and prices above the moving average (position) would indicate an uptrend. Declining moving average values and prices below the moving average would indicate a downtrend. A displaced moving average plots the moving average value of a previous bar or later bar on the current bar.

Here we want to emphasize that the EMA is used as support and resistance. Since the EMA line, which has much more weight with the last few bars, is closer to the market prices, so it's a fast way to see it as the support or resistance level holding or not. Normally, if the bar close prices are above the EMA line, it indicates an uptrend, and the EMA line becomes a support line. If the bar close prices are below the EMA line, it indicates a downtrend, and the EMA line becomes a resistance line.

Averaging length used by the MA varies. For daily charts, use length 10 for short-term trend, 50 for mid-term trend, and 200 for long-term trend. Why? Most institutional pro traders and common trading software are set up this way.

Of the three types of moving averages discussed earlier, we prefer to use the Exponential Moving Average (EMA) with default length 10. It is mainly used as a support and

resistance line. We don't want to explain how to use the moving average in each case. Here is a general idea of how we use it:

- **For entry:** Wait for the market to pull back near the EMA line. Use it as a support and resistance line.
- **For exit:** For a long position, if the market pulls back below the EMA line for three consecutive bars, exit the long position. For a short position, if the market rises above the EMA line for three consecutive bars, exit the short position.

Moving Average Convergence/Divergence (MACD)

Moving Average Convergence/Divergence (MACD) is a technical analysis indicator that was created by Gerald Appel in the 1960s. It shows the difference between a fast and slow exponential moving average (EMA) of closing prices. Moving averages are trend-following indicators that don't work well in choppy markets. Oscillators tend to be more responsive to choppy markets. The MACD indicator combines trend and choppy characteristics. MACD basically is still a trend-following indicator.

Calculations

$$\text{MACD} = \text{EMA1} - \text{EMA2}$$
$$\text{Avg.MACD} = \text{Average (MACD, N)}$$

where MACD is value of moving average convergence/divergence
Avg.MACD is average value of MACD
EMA1 is fast exponential moving average
EMA2 is slow exponential moving average
N is length of average MACD

Default Parameters

Price value is close.
Length of EMA1 is 12.
Length of EMA2 is 26.
Length of average MACD is 9.

Usage MACD is a trend-following indicator that is designed to identify trend changes. It's generally not recommended for use in ranging market conditions. Three types of trading signals are generated:

- MACD and Avg.MACD *line crossing.* Crossing above means bullish or uptrend and crossing below means bearish or downtrend.
- MACD line *crossing zero*. Above zero means bullish and pay attention to uptrend; below zero means bearish and pay attention to downtrend.

- *Divergences:* The MACD also helps identify divergences between the indicator and price activity that, in turn, warn of trend reversals or trends losing momentum.

Without going into too much detail about specific cases, I simply use it as an indication of a bullish or bearish market. A crossing of the MACD line up through zero is interpreted as bullish, or down through zero as bearish. These crossings are of course simply the original EMA1 line crossing up or down through the slower EMA2 line.

ADX

J. Welles Wilder Jr. developed the Average Directional Index (ADX) to evaluate the strength of a current trend, be it up or down. It's important to determine whether the market is trending or choppy (moving sideways), because certain indicators give more useful results depending on the market doing one or the other. The ADX indicator is included in AbleTrend software.

Wilder, one of the world's most respected system developers, published his book *New Concepts in Technical Trading Systems* in 1978. He used mathematical formulas, calculation tables, and chart examples to lay out and explain eight trading systems in the 100-page book. He really wanted to teach something.

Calculations We will skip the detailed calculations to save space. I summarized the formula after reading Wilder's book and it ran to a length of four pages. If you are interested, you may refer to Wilder's book. He introduced the concepts of "true range" (TR) and "directional movement index" (DMI) inside the ADX.

Default Parameters

Default value of length is 14.

Usage The ADX is an oscillator that fluctuates between 0 and 100. The ADX doesn't say whether the trend is uptrend or downtrend, but only how strong the trend is. Low readings indicate a weak trend and high readings indicate a strong trend. A high reading can indicate a strong downtrend as well as a strong uptrend. Even though the scale is from 0 to 100, readings above 60 are relatively rare. Low readings, below 20, indicate a weak trend, and high readings, above 40, indicate a strong trend. The indicator does not grade the trend as bullish or bearish but merely assesses the strength of the current trend. A reading above 40 can indicate a strong downtrend as well as a strong uptrend.

ADX can also be used to identify potential changes in a market from trending to nontrending. When ADX begins to strengthen from below 20 and moves above 20, it is a sign that one trading range is ending and a new trend is developing.

STARC Bands

The Stoller Average Range Channels (called STARC bands) indicator was developed by Manning Stoller in the 1980s. Manning is an AbleTrend user, and an original member of

the CFTC advisory committee in the 1970s. I met him at one of my seminars in Miami in 2007. He verified the formula used in our AbleTrend software.

The STARC bands are designed to interpret market volatility using a measure of the average true range (ATR). The STARC Bands create a channel above and below a moving average of the instrument's underlying price; the width of the channel expands and contracts depending on the fluctuation in the ATR.

The upper STARC band is calculated by adding a value of the (ATR × ATRMultiplier) to the moving average. The lower STARC band is calculated by subtracting a value of the (ATR × ATR Multiplier) from the moving average.

Calculations

ATR – Average True Range (Length 1)
EMA – Moving Average (Length 2)
STARC Band1 = EMA + ATR
STARC Band2 = EMA − ATR
STARC Band3 = EMA + 2 × ATR
STARC Band4 = EMA + 2 × ATR

Default Parameters

Length 1 is 15.
Length 2 is 6.

Usage I simply use the STARC bands for partially exiting positions. Based on Stoller, if the market price hits the band 1 or 2 (inside bands), there is a 95 percent chance the market might turn (retrace) back. You may exit half of your positions. If the market price hits the band 3 or 4 (outside bands), there is a 99 percent chance the market might turn (retrace) back. You may exit all of your positions. Of course, there is still a 1 percent chance that the market will keep moving up for an uptrend or down for a downtrend when the trend is very strong. In fact, you only need to plot the inside bands, band 1 and 2, in most cases.

I found that STARC bands work much better than Bollinger bands, which uses two times the standard deviations. The Bollinger Bands have too many false hit signals compared to STARC bands.

MARKET INDICATIONS

In addition to the trend definition and trend indicators we just looked at, we may also use a variety of "market indications" to help us identify or confirm the direction of the trend.

Market indications are commonly used market statistics or indices. They are very important to watch because they can help us determine market actions and directions.

With market indications, it is traditional to use the term "bullish" to describe a market in an uptrend, and "bearish" to describe a market in a downtrend. In our trend-trading applications, it is important to us to watch market indications and follow them because we don't want to trade against such "bull" or "bear" conditions.

Among the thousands of market indices that have been developed over the years, the following are the most commonly used. These market indications are widely used by institutional traders and fund managers. When you watch these indications, you are watching the same information as the institutional traders and fund managers.

With over 10,000 market indications available to the trader, which ones to watch is a big issue. For our purposes, less means more. We have selected a few of the more popular and effective indications, which, for the most part, are also the ones watched by the big institutional traders and professional traders.

Futures

When you are trading the cash markets, such as stocks, bonds, currencies, and so forth, you also need to watch the corresponding futures markets. There are 40 to 50 major futures and commodity markets in the United States.

Commonly watched futures markets:

DJ: Dow futures
SP: S&P 500 index futures
ND: NASDAQ 100 index futures
US: U.S. 30-year T-Bonds futures
GC: Gold futures
CL: Crude oil futures

CNBC and Bloomberg TV display the futures prices on the screen each day before the market opens. They compare the futures prices with their "Fair Values" of cash at the time of the market close to predict the next day's market opening gaps.

Cash

There are more than 10,000 market statistics or indices for major exchanges around the world. When you trade futures markets, you must watch the cash indices. The symbols used at this book are based on AbleFeed (i.e., eSignal DM) data.

Commonly watched cash indices are

$INDU: Dow Jones Industrial index
$SPX: S&P 500 index
$COMPQ: NASDAQ Composition index
$NDX: NASDAQ 100 index

TABLE 2.1 Cash Indicators

Index	Change	Indication	Change	Indication
$INDU	+50	Bullish	-50	Bearish
$SPX	+10	Bullish	-10	Bearish
$COMPQ	+25	Bullish	-25	Bearish

When you see changes of $INDU +/– 50, $SPX +/– 10, or $COMPQ +/– 25 points, they indicate bullish or bearish trends in the markets.

Traders should *not* trade against the cash markets when they are strongly bullish or bearish, especially in the last trading hour. People who find themselves in wrong positions tend to exit their positions during the last trading hour, which normally pushes the market to become more extremely bullish or bearish.

Premium

The premium is the difference between the futures and the cash prices. They have a fair value for certain days of the month.

$PREM is the symbol of the premium of S&P 500 futures.

A higher premium indicates bullish conditions. A lower or negative premium indicates bearish conditions.

Tick

Tick means the difference between number of advanced stocks and the number of declined stocks.

$TICK: NYSE Cumulative Tick, updated every 6 seconds

$TICK: Tick of Dow Jones 30 stocks, updated every 6 seconds

Watch best buy or sell opportunities with tick indicator for day trading or short-term swing trading. Going up of the tick means bullish, and going down of the tick means downtrend. You may also apply T1 and T2 to the $TICK 5-minute chart.

Volatility

Volatility is one of the key factors for calculations of option prices. When the market is bullish and less volatile, the option prices (premiums) are lower. However, when the market is bearish and more volatile, the option prices (premiums) are higher.

$VIX is the symbol of Volatility (Chicago Board Options Exchange) for S&P 500 index options, updated every minute (note: option prices are mainly determined by the Underwriting Price, Strike Price, Volatility, and Time). This is an indication of how scared traders are. If more people want to buy options to protect their trading positions, then $VIX will be higher. This means people must pay higher prices to buy options. The goal of $VIX is to estimate the implied volatility of the S&P 500 index over the next 30 days.

Market bottoms happen when $VIX is very high, most people are really scared, and option prices are way up. On the other hand, market tops happen when $VIX is very low, traders are very relaxed, and they keep buying while ignoring option protections.

The normal value is around 20. Above 30 means the market is bearish. The $VIX value even reached 90 around 10/24/2008 under financial market crisis conditions.

Ratio of NYSE Advance/Decline

$ISSU is the symbol of NYSE Advance/Decline stock ratio, updated every 30 seconds. If Advance/Decline stocks are the same, the value should be 1. A value above 1 means more stocks being price up than price down. A value of less than 1 means more stocks being price down than price up. In a good up day, $ISSU can reach 2, 3, 4, etc. In a bad down day, $ISSU can be 0.5, 0.2, 0.05, etc. You may also apply T1 and T2 to the $ISSU 5-minute chart for observing the stock market's internal bullish or bearish conditions.

THREE RULES FOR FOLLOWING TRENDS

As technical traders, we wish to ride trends to profits and exit markets when trends change and begin moving against us. We want to act safely, and that means acting on facts, not wishes or assumptions. Here are three rules that are critical to remember if one wishes to trade trends safely. We also discuss more details on this topic in Chapter 4.

- *You cannot pick a top or bottom based on trend definition.* If you use the trend-following method, forget about trying to pick a top or bottom. The trend-following method is based only on fact, not assumptions. Follow trends as they present themselves. Act on what the market is telling you. You can make nice profits without trying to outsmart the market by trying to predict a top or bottom yourself.
- *You cannot assume the trend will continue* after a pullback. Let the market tell you what it is doing. Never assume. If you are in a good trend, the trade should not lose. However, if you see two consecutive losing trades even though you are following the trend definition, it means the market is choppy, and you should stop trading that market at that time. Or, you need to switch to a longer time frame and see the big trend direction.
- Based on trend theory, you may know the market is going up or down, but *you don't have information about how high or how low the market will go.* Let the market guide you for maximum profits. With trend-following methods, the winning rate is only about 50/50. However, as trend-followers we make large profits because we use market signals to ride the trend in winning trades, and keep our losses small by exiting losing trades as quickly as possible.

THE GOLDEN REGION OF ENTRY: THE SWEET SPOT

Identifying the most promising buy or sell entry points is a different process from defining a trend. Knowing that a trend has formed based on 1-2-3-4 or 1-2-3 patterns does not mean that we should enter the market as soon as the trend starts. In fact, in most cases there are pullbacks, and we want to wait for a pullback in prices before we enter the market. What we want to do is identify what we call the **Golden Region of Entry** or **Sweet Spots.**

Why Sweet Spot?

Why should we do this? The chart in Figure 2.28 will help you understand. Entering the market on the first breakout is normally very risky. For example, if we entered right after point 2 was breaking out, we would be caught in a wrong side.

We do not trade a market that is moving sideways, as there are no profits to be made. We only trade when the market is trending. Again, what's a "trend"? In simple words, for an uptrend, you must see a succession of price bars with higher highs and higher lows.

FIGURE 2.28 It is risky to enter trades at the first breakout of the low point "2." On this chart, prices rose to point 3, but then dropped before a good profit could be made. Good entries are normally after point 4, near point 5. One should wait for a confirmation of both the start of a trend and the "Maturation of a Trend" before entering into a trade. For this chart, after point 4, we see higher lows and higher highs, which prevents us from making the mistake of shorting the market (we didn't get confirmation of the downtrend).

This trend definition is your foundation. All other indicators are secondary, and they are always delayed due to the additional price bars needed for averaging calculations. This means you never can enter at the key turning points; you must wait for confirmation of the trend formation. AbleTrend2 can guide traders to enter the market at low risk points (near stops and key support and resistance levels).

Always ask yourself this question before entering a trade: Is the market now in an uptrend, a downtrend, or is it a choppy market?

Only trade the best trending markets. We normally have 3 to 5 days each month where we see such good trending markets. If you use 2- to 5-minute charts, wait for wave 4 or 5 or later to enter the market. The T2 dots can guide traders very well at that time. One way AbleTrend users can see this easily is to apply the T2 indicator and the 10-bar moving average line to the chart. It is then possible to mark the 1, 2, 3, 4 points, identifying tops and bottoms as appropriate for the market direction.

The Golden Region of Entry Is a Low-Risk Entry

In Figure 2.29 we marked the golden region of entry near point "5." It is a low-risk entry point because: (1) it is near the T2 stop, your initial stop is small; (2) you will know it

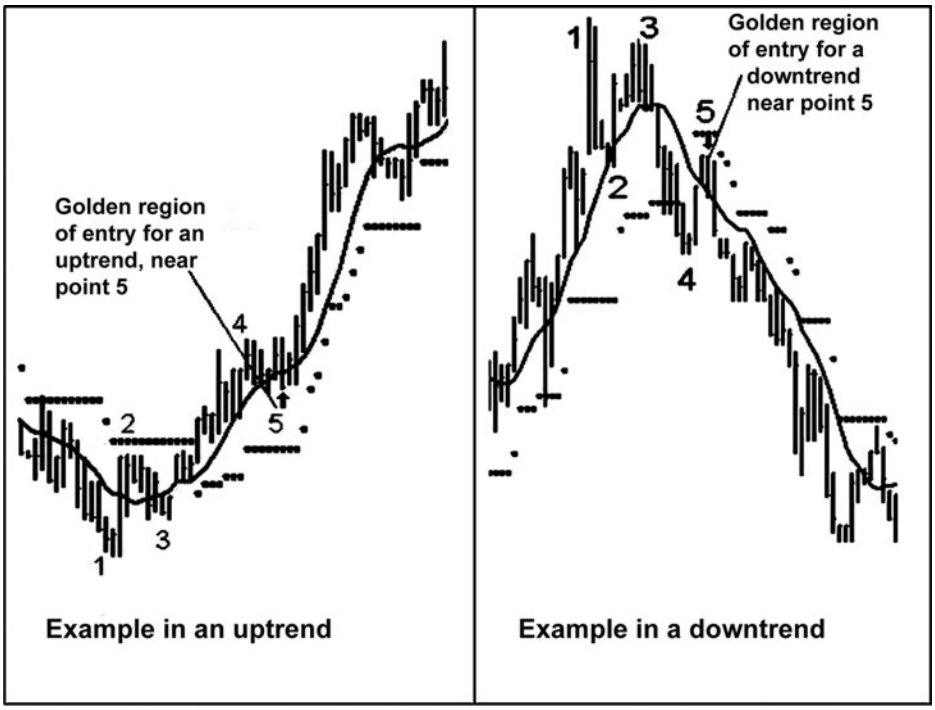


FIGURE 2.29 Using the Golden Region of Entry in Uptrends and Downtrends. For an uptrend, wait until the market pulls back near the EMA line, and still above the T2 stops. We marked this as point "5." For a downtrend, wait until the market pulls back near the EMA line, and still below the T2 stops. We marked this as point "5."

is right or wrong very soon. It is a so-called testing point for a trend. If the price cannot penetrate the T2, it is a pullback, but if it breaks out the T2, then the trend should be ending.

The Golden Region of Entry occurs at an area after point 4, when the price has pulled back between the 10-bar moving average and AbleTrend2. We wait for the price to resume the previous trend direction, and we enter the market at that time. When prices reach point 5, we have a confirmation of the trend.

No one can have winning trades 100 percent of the time. Sometimes a trade is wrong. But we need not worry when we have AbleTrend2 stops to guide us. We will know very soon if the trade is right or wrong by observing whether or not prices break the Trend2 stops. If the stops are broken, we can limit our losses by exiting the trade.

We cannot assume where point "5" is. We need the market to tell us when point 5 has formed. We must wait for blue or red bars to show up in real time, informing us that point 5 has formed. Assuming that it has formed is only our own opinion. The appearance of blue or red bars after point 5 tells us what the market is telling us about what it is doing. To trade successfully we need to follow the market, not try to predict what the market will do.

What should we do if the market continues on without a pullback? It's okay. In trading, another bus is always on its way. We will do other things, like watch a DVD. Read more about this issue in Chapter 3.

Trading the "Sweet Spots"

The AbleTrend software signals what we call the "sweet spots"—optimum times to get in on a trade—for an uptrend, with the first closed up bar to appear after a series of choppy bars, as shown in Figure 2.30. We marked as "SSb." First, the trader applies the T2 indicator to the chart. After a buy (or sell) signal is given, and the market tests the protective stops and moves sideways for a while (as indicated by many dots lined up below the bars), a first bar breaks up the region, indicating a resumption of the trend. This is the sweet spot, a low-risk entry point.

When traders know the market support levels, they can enter the market anywhere after the market first tests the support. If the first entry is missed, the sweet spots provide a second or third chance to get on board the trade with relative safety. For traders who already have a position in the market, the sweet spots indicate that this is a good time to add to the position. That way, it is possible for traders to buy with confidence—and expand their total gain on the trade. We will have more to say about trading sweet spots in Chapter 5.

About T2 Stops

T2 provides protective stops as a means to help traders protect gains or limit losses. The reason some traders have big losses is that they do not see quickly enough that they have

FIGURE 2.30 Example of a sweet spot entry. (See SSb marks on the chart.). The T2 indicator is applied to the chart. If the first entry was missed, the sweet spot provides a second chance to get on board the trade. The sweet spot is also a good place to add to positions, allowing traders to buy with confidence—and expand their total gain on the trade.

gotten in on the wrong side of the market. With T2 stops, traders may identify whether their positions are right or wrong in a very short time. When positions are entered near the T2 stop levels, the risk should be low in most cases.

How T2 stops work: Traders typically place a "stop-loss order" at a predetermined dollar level. That way, if the market moves against the trader's position, it will automatically liquidate the position and limit further losses.

T2 uses principle-based or "intelligent" stops. These stops are placed at the market's key support and resistance levels. The software provides stops with small dots placed below the bars for buy positions, and small dots placed above the bars for sell positions.

These intelligent stops are dynamic and automatically adjusted by the software as prices change. A built-in feedback loop retrieves the data for market direction, price range, and momentum.

Because the stops are determined by actual market conditions, they are objective, reliable, back-testable, and safe to use in real-world trading. Best of all, intelligent stops virtually eliminate margin calls and drawdowns.

TIME, PRICE, FORECASTS, PREDICTIONS, AND TARGETS

Turning points of time or price, forecasts, predictions, and target prices are on the wish lists of most traders. We get such requests frequently—can you build some kind of forecasts in the software? We want to briefly address these topics from the point of view of a trend-following method.

AbleTrend method only knows the past and now. The most significant difference of AbleTrend from "Forecasts," "Predictions," or "Targets" is that all the signals of AbleTrend just try to tell you what was observed and analyzed from the historical and current market data. It is not a prediction for anything. It just converts the market's movement to straightforward language: the trend direction—up, down, or sideways—and the location of the key support or resistance.

Forecasts

The AbleTrend software acts on the *facts* of what the market is actually doing, not on any assumptions or predictions. To show you why this is important, I will now compare the AbleTrend method with other methods that involve "Forecasts," "Predictions," "Targets," etc. that they claimed could reveal the future. This will help you distinguish the major differences between the methodologies.

In a typical two-dimensional chart, the X-axis represents time, and the Y-axis represents price. A point is defined by the two values (X, Y). If you know the "*turning point*" for one of the values, time or price, then you already have the key information for how to trade the turning point. You don't need to know both values of a turning point in trading. Knowing one value is good enough for a trade.

Being able to forecast or predict market movement has always been a dream to most traders. Over the years, many theories have been developed for "cycles" and "wave projections" that could predict market turning points and project target prices. Unfortunately, these methods do not work in practice. Why don't those forecast methods work? As Larry Williams said, "Eventually, I realized that God does not want us to see the future. It is as simple as that." And he added, "God with infinite wisdom, does not want us to know much about the future and for sure very little about the future of futures." (Williams 1999).

Most of the forecasting methods are purely based on arbitrary assumptions. Two famous examples are Elliott waves (Elliott 1980) and Gann projection (Gann 1951).

Everyone wishes they owned a crystal ball that can foretell the future. But do you really believe such a crystal ball exists?

Why Forecasting Methods Do Not Work

There are four very good reasons why these forecasting methods do not work in the real world:

1. The wave assignments are always made after the turning points have formed. They are a pretend crystal ball that only shows events after they have happened, not before.
2. Such software keeps changing the assignment. For example, if a top was assigned as wave "3," but after a few bars, the market kept moving higher, the software would erase the assignment for top point "3." In addition, this approach often uses "subwaves" to "explain" discrepancies. Between waves 1, 2, 3, 4, and 5, there are subwaves called a, b, c, d, e, etc. And all these assignments are made after the fact. There is really no value in trading by following such signals.
3. Any price projection must have an "origin." But the origin is normally assigned after the fact. For unknown out-sample charts, there is no way to know what the origin should be. After the fact, people always can explain why the top should be here, and bottom should be there. Some books show how good a price projection was. They explain that going from price A through an origin "O," you may get a price projection B. However, the picture in Figure 2.31 was created after knowing all the facts. In real time, one would have no way of knowing the location of origin "O."

As often shown in some books, for example, in Figure 2.31 we see a correct projection, but one created after the fact. One can first select two tops to define a trendline (connecting T1 and T2), and then show AO = BO as a good price projection. But how would one know to select those particular points for T1 and T2? How would one know to draw the line AB in that spot? It is all done based on already knowing the top point B. Without knowing this in real time, we might draw something wrong, as seen in the chart in Figure 2.32.

4. Another type of forecasting involves the use of "average value." Some trading software claims 80 percent accuracy using this method to forecast the "averaging price" of the next two days. Our question is: 80 percent accuracy of what? You should ask yourself the same question. Those software providers use some common "tricks" to make this claim. They either forecast an average value or use "in sample" data for

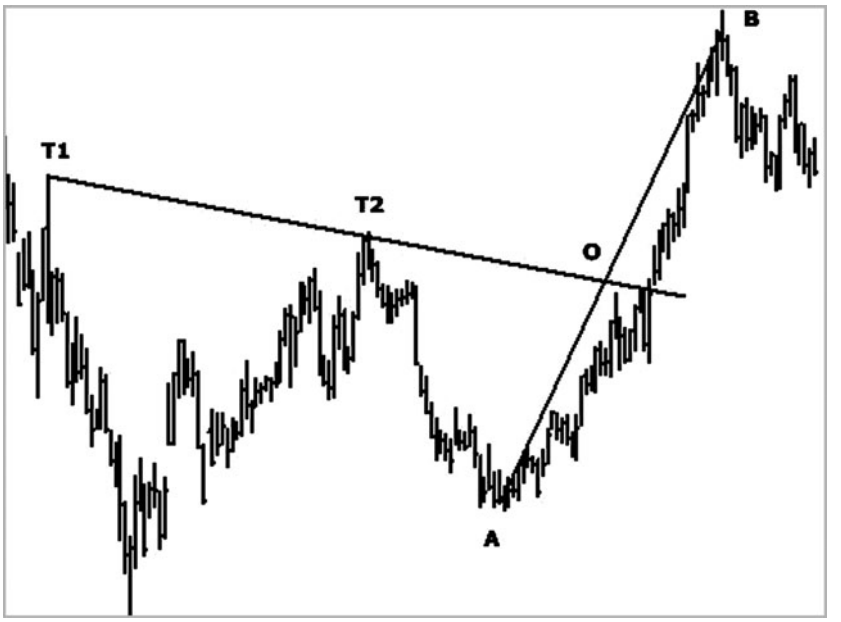


FIGURE 2.31 One price projection method used in other books.

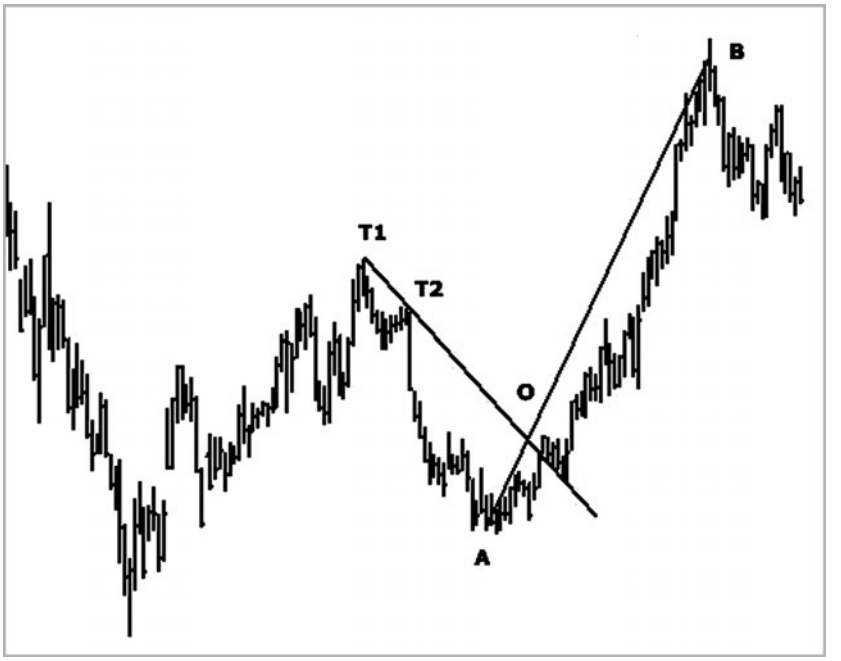


FIGURE 2.32 Price projection doesn't work, as we see most of the time. Projections in Figure 2.31 were done after the fact. There is no real application for such price projections.

their forecasts. This is highly misleading. First, average value means nothing in a specific trade. Prices might fall first, then go up. Or prices might rise first, then go down to reach the same average value. "In sample" data means the data that's being forecast is itself used in the forecasting calculations! This might seem complicated, but its meaning is simple: When this type of forecasting is applied to actual data to forecast future price movements, it will fail.

CYCLES AND WAVES

The opposite of the trend-following approach to trading is "cycle" trading. Cycle trading is a popular approach among some traders, and I briefly examine this issue here and discuss the possible cycles that may be hidden within market moves.

Is there any cycle in any market? The answer is "yes" based on the philosophy described in Chapter 4. Trend and cycle are co-existing. From as big as our solar system to as small as atoms, from vast ocean tides to inside the human body, we know there are all kinds of cycles. Cycle is a basic movement format of the universe. Light, sound, energy—all move in a format of waves. So do the markets. We already observed cycles in markets; we just don't quite understand the exact formula yet.

Some trading books focus on cycles, waves, forecasts, and predictions for market turning points, or tops and bottoms. Some of them describe ways to use cycles and waves to arrive at forecasts or predictions of price targets and market activity. These topics are beyond the scope of this book; however they are interesting, and so we will examine some of these ideas briefly.

Some people use "4 days" or "13 days" to analyze a market's external cycles or turning points. It would require another book to discuss this topic. However, if there were a market cycle or turning point, it would probably be related to "7 days."

"Seven" Is a Magical Number

"Seven" is a very special and magical number for the earth. Human hormones have daily, seven-day, and monthly cycles. A woman's menstrual cycle is 28 days (4×7). The lengths of pregnancies throughout the animal kingdom are related to the number seven:

Chicken: $3 \times 7 = 21$ days
Rabbit: $4 \times 7 = 28$ days
Cat: $9 \times 7 = 63$ days
Tiger: $15 \times 7 = 105$ days
Human: $40 \times 7 = 280$ days

The number 7 is significant for calendars:

One week = 7 days
One year: 52 weeks × 7 days/week = 365 days
A lunar month is about 29.5 days (about 4 × 7 = 28)
Ocean tides have 7-day and monthly cycles.

Now let's see how this might relate to trading. A reversal in the market occurs when the close of the current daily price bar is below the close of the previous day's price bar when the market is trending up. In a market that is trending down, a reversal occurs when the close of the current daily price bar is above the close of the previous day's price bar.

Some people believe the market turning point (reversal point) is related to 7 days. Why do they believe that market turning points and 7 days are related?

Please note that here the "7" is an approximation because 29.5 / 4 is 7.375.

- First, a "day" is defined by the spin rate of the earth itself, not some random length of time somebody selects.
- The cycle of the moon from one new moon to the next is called the synodic cycle. It is a "month," or 29.5 days in length. It's about 4 × 7 = 28 days.
- The lunar (moon) calendar was first created in the Xia Dynasty of China 3,500 years ago, and it is still widely used in China today. Major holidays are based on the lunar calendar.
- The new moon (NM), first quarter (FQ), full moon (FM), and fourth quarter (FQ) are separated from each other by about 7 days.

Considering that market prices reflect the actions of human beings, and human bodies are largely made up of water, this idea isn't so far-fetched. We can see the lunar effects on the tides here on Earth and how powerful they are. Why couldn't this powerful influence affect other aspects of life as well?

Moon and Water

Among our sun, moon, planets, and stars, the movement of the moon has the strongest effects on water, and therefore on life on Earth. With 90 percent of the human body being made up of water, the moon could affect us in unknown ways. Trading is a mass behavior of human beings. And it is not inconceivable that the mass psychology in trading might be affected by the cycle of the moon.

However, while the market "cycle" may reflect forces external to the market, the market trend itself reflects its own internal forces. Therefore, we don't have to refer to cycles of the moon to predict price action. The market trend remains the major factor in

trading. It is the only information we need, regardless of what its underlying cause might be. If we can master the market trend and identify when each trend starts and ends, we may simply ignore the cycle and all other factors that may be influencing buying and selling activity.

SUMMARY

My aim for this chapter was to make it amply clear that understanding trends is critical to trading intelligently and successfully. We've gone over the basics of recognizing trends and how they can be used to make trading decisions.

The naked eye cannot always pick out the critical details of trends, and people can be easily misled to draw trends inaccurately. Many complicated factors can be used to describe trends, project prices, and select exit targets, but many of these, such as wave projections, can also be misleading and difficult to use.

The AbleTrend indicators make it easy and automatic to recognize trends, along with favorable entry and exit points, giving traders a huge advantage in navigating the markets. By using the information the market itself is giving through its price action, AbleTrend is based on the only reliable source of data there is, which allows it to provide more accurate entry and exit points and stop placements.

After you finish Chapter 2, you may understand that this is the most important chapter of this book. It teaches how to identify and analyze a trend, and what is the beginning and ending point of a trend. When you hold a position, it continually confirms a trend, and if the trend is still there or already reversed, it confirms where the protection stop level is and much more. We tell you how to see all of those. Without the knowledge here, most traders might not see the trend. Through the lens of AbleTrend, you may see the world in a whole new way.

Observe the following image:

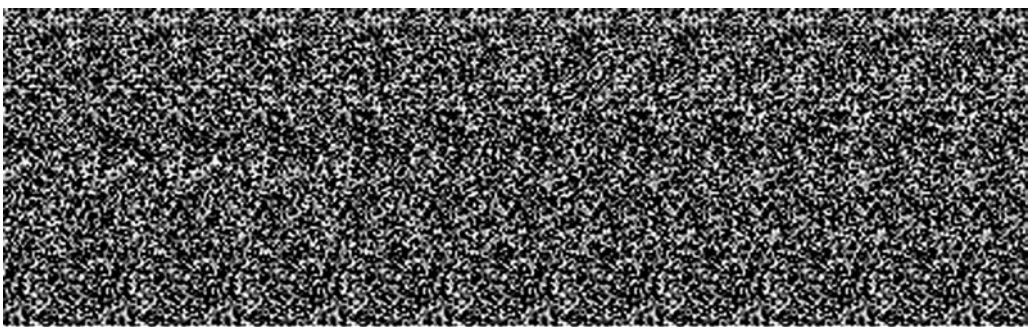


FIGURE 2.33 Information mixed with a lot of noise. Only the most experienced people may see it.

Even though I told you that the hidden and floating image "ABLE" is at the center, how many of you still cannot see it?

How about this image:

FIGURE 2.34 After removing the noise, the key information is displayed clearly. AbleTrend is designed for this purpose.

The naked eye cannot always pick out the critical details of trends, and people can be easily misled to draw trends inaccurately. Many complicated factors can be used to describe trends, project prices, and select exit targets, but many of these, such as wave projections, can also be misleading and difficult to use.

AbleTrend is NOT a prediction or forecast for a market. It is an *observation* of market trends, a *picture* of market actions that you may visually see, a *language* that the market is using and you can easily understand. It tries to become a *mirror* of the markets. Just like in Figure 2.34, AbleTrend displays the key information that you can understand.

CHAPTER 3

Four Elements of Trading Success

To secure ourselves against defeat lies in our own hands, but the opportunity of defeating the enemy is provided by the enemy himself.
—*The Art of War* by Sun Tzu (500 B.C.)

Trading is a zero-sum game. That means that every gain by one trader is offset by an equal loss by other traders. One man's pain is another man's gain. Obviously, it is every trader's goal to be on the winning side of the equation.

Many trading books have offered guidelines on how to succeed in trading. Some suggest that trading psychology is the key, attributing up to 90 percent of success in trading to that factor alone. Some claim that the trading method itself is the key, and that having access to accurate buy, sell, and exit signals is the foundation to profitability. Some books rate money management as the primary issue in trading. Still others hold that capital and portfolio allocation as the key.

What is the most significant for you as an individual? Every trader should do a little "soul searching" to find the answers to the two following questions:

1. What is the key to success in trading? Or put more simply, what's your winning edge?
2. Why do you think you can win?

We talk with many traders who seem confused on these issues. They have no idea how they can have an advantage in the markets that will keep them on the winning side of the zero-sum game. They know they want to succeed but are not sure why they think it's possible for them to do so.

Given my long-term experience in the markets under a variety of conditions, I believe that *a combination* of the following four elements is the foundation on which one can

build success in trading. It is necessary for traders to have all four elements working together. These four elements are:

1. A profitable trading system/method.
2. Adequate capitalization.
3. Money management strategy.
4. Discipline or a winning trading psychology.

In this chapter we will delve deeply into each of these elements in turn and clarify the significance of its role in successful trading. We will also look at how I incorporated these elements into the AbleTrend software so that users can be sure they are in the best position to face the challenges of today's markets.

PROFITABLE TRADING SYSTEMS AND METHODS

Trading systems or methods are sets of rules that are developed to provide traders with buy/sell/stop/exit signals. Traders adopt systems that they believe will best help them know when to enter and exit trades, and in what direction; and where to place stops to protect accumulating profits or limit losses. Without a system, making trading decisions would be a random process.

Three Approaches to Trading

In general, we can identify three different types of trading styles that traders adopt. These include discretionary trading, system trading, and hybrid trading. It is up to each trader to decide which of these trading styles offers the best fit given his or her beliefs and personality. The following descriptions summarize the basic characteristics of each approach.

Discretionary Trading Discretionary trading uses a combination of intuition, market data, and technical analysis (often through the use of indicators) to determine the most favorable times to enter and exit the market. With discretionary trading, individuals make trading decisions "on the spot" based on their interpretation of charts. Their decisions reflect the interaction of:

- Traditional indicators (e.g., moving averages, etc.).
- Chart analysis and interpretation (e.g., identifying areas of support and resistance, trend formations, etc.).
- Emotional involvement (e.g., "I don't mind taking a greater risk, so I'll place my stop a little further away").

The trader's justification for using this approach is that it:

- Is flexible in changing the rules in the face of changing market conditions (e.g., if the market is trending, I use trending rules; if choppy, I use choppy rules).
- Allows you to improvise the use of trading methods when it seems warranted by the results achieved so far.
- Factors in years of trading experience.

Bottom line: If you trust your instincts, this could work for you. But you might want to ask yourself, "Do I feel lucky?"

System Trading System trading uses an objective and historically tested set of rules based on principles of technical analysis to determine when to enter and exit the market. Normally, this results in 100 percent mechanical trading. It requires a lot of homework ahead to select and to validate the winning trading systems. That is, traders simply follow the system's signals without any input of their own. This kind of approach has sometimes been called algorithmic trading, automated trading, black-box trading, or robo trading. Traders do their homework ahead, investigating available systems to select the program they will use. Once they've committed to a program, they follow exactly the buy/sell/stop/exit signals given by the mechanical system.

The trader's justification for using this approach is that it:

- Is tradable—specific trading signals alleviate guesswork.
- Is simple—easy to understand and to trade.
- Generates high performance—which can be more profitable for the long term than intuitive trading.
- Builds confidence—which grows through use of back-testing reports.
- Is mechanical—this approach makes possible full auto-pilot trading or broker-assisted trading.
- Is low risk—risk is reduced and calculated because rules and strategies can be tested before trading real money.

Bottom line: This approach is more effective than discretionary trading, but it can have timing issues as explained further on. Selecting a winning system is a time-consuming job!

Hybrid Trading Hybrid trading is a combination of the two preceding methods. It allows traders to use a mechanical trading system as a guide for a winning framework, while allowing the input of personal trading experiences or other own indicators to make final trading decisions.

Here's why this is so important: One big problem with 100 percent mechanical trading systems is that traders must act upon signals that are given at the end of the price bars (e.g., at the end of 5 minutes for a 5-minute chart, or at the end of the day for a daily

chart). However, during the formation of a bar, the tick price can move up and down considerably. During this time buy or sell signals may appear, change, or disappear. But with a 100 percent mechanical system, traders are limited to entering only when the signal is given, at the close of the bar. Therefore, traders will always be operating on a delay. They might often see the system winning if they could enter in real time, but might end up losing if they enter at the bar close. Hybrid trading can overcome this problem because traders may enter trades in real time without waiting for the bar close. For example, they may enter their positions when only 80 percent of the time passed for the bar. Or, they may use support and resistance or a longer chart to guide the trading direction.

We talk in more detail about hybrid trading and the simplified trading method (STM) in Chapter 5.

The trader's justification for using this approach is that it:

- Is tradable—hybrid systems are tradable, offering specific signals as found in system trading.
- Is simple—guided by a mechanical winning framework, the majority of guesswork is removed.
- Builds confidence—which can grow with back-testing reports, as in system trading.
- Is flexible—improvised trading methods can be used as in discretionary trading.
- Factors in experience—trading experience can be taken into account in discretionary trading.
- Is broad—works with any time interval.

Bottom line: With a hybrid system, traders enjoy the best of both worlds. They can enjoy the winning framework based on mathematical formulas, while being able to factor in their own logic.

The First Crossroad in Trading

When you start trading, the first crossroad faced is the question, "Should I be a discretionary trader, or a system trader, or a hybrid trader?" Every trader needs to make a decision here; see Figure 3.1.

New traders have many questions and must learn to identify the style of trading with which they feel most comfortable. They should ask themselves:

- I want to be a discretionary trader—which indicators do I use?
- I want to be a system trader—which system do I use?
- Day trading? Swing trading or position trading?
- Or do I want to combine them?

Individuals who decide to be system traders have to find a trading system that really works for them. However, finding such a system can be like finding a needle in a haystack. Here are some issues such traders should consider:

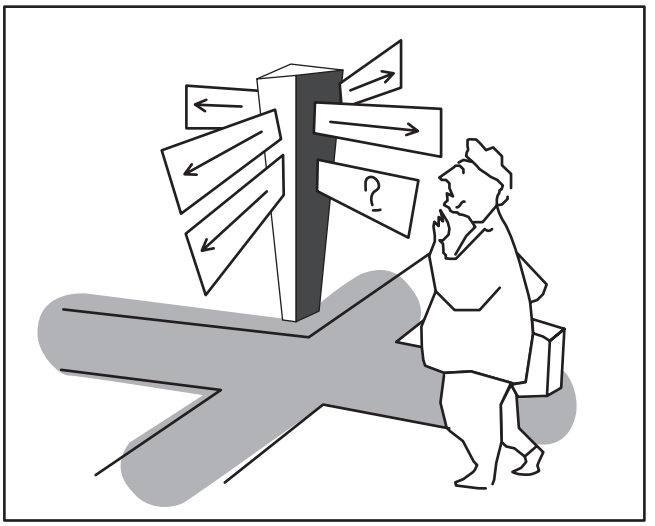


FIGURE 3.1 The first crossroad in trading. Every trader needs to make a decision here.

Do I Want to Develop My Own Trading System? Some trading software offers you the "materials," "parts," and "tools," and then asks you to build a "car" yourself. This is of little use to traders who are not ready! The software program that most traders really need is a "car" that is fully tested and ready to drive. They need a turn-key solution that they can learn how to drive like a car, without having to build the car themselves. Traders should be able to focus on how to use the system to trade rather than have to focus on building a system. If you are in the market for trading software, look for a program that offers a ready-to-use system that does not need to be programmed by you, but at the same time has the flexibility to let you change the configurations when you want to, to match your own trading style.

I don't intend to discourage you from writing your own trading systems, but let me share with you some facts. This is easier said than done. There are many factors involved in developing a usable, effective, universal trading system. People may tell you it is easy, but my experience of nearly 20 years as a trading system developer proves that it is not. The process involves:

- Time, amounting to many years.
- Outlay of a great deal of capital.
- Trading knowledge based on experience.
- Computer and programming skills.
- Ability with logic regression.
- Luck.

Obtaining the complete combination is rare, which is why so many trading systems that are available today fail to live up to their promises.

Do I Want to Buy a Trading System? With countless trading systems on the market, how do you identify the one that is really going to work for you?

Here are the criteria you should consider in selecting a trading system. Ask yourself, does the system:

- Work for trading the markets I prefer?
- Seek potential profits that meet my goal?
- Have an initial account size requirement that meets my financial situation?
- Have an average drawdown that is within my risk tolerance?
- Have a record of scientific testing (for both historical trades and simulations)?
- Offer an actual trading record that gives me confidence?
- Suit my trading style (day, swing, position, or portfolio trading)?

Use this checklist when examining different trading systems. If the system does not meet your critical requirements, it will not be easily usable by you, nor is it likely to give you the results you are looking for.

Validation of a Trading System

A trading system must be "valid," that is, it must be proven to work, before you should even consider using it.

If you are new to trading system development, you need to know there are really two steps involved in developing a winning trading system or strategy.

1. 20 percent effort is expended in *developing* the trading system
2. 80 percent effort is expended in *validating* the trading system

What do these statements mean?

Normally in developing a trading system, only 20 percent of the job should involve developing the trading system itself—developing formulas, designing indicators, and so on. Eighty percent of the job should involve validating the trading system—proving that the signals it provides lead to profitable trading decisions. Back-testing using historical data and forward-testing should be part of the validation process of any trading system. Think of the parallel to developing laser-guided missiles, where the testing, calibration, and global position systems (GPS) have the same importance as the laser guidance system itself.

Market situations change all the time. When you select software, you need to make sure that the software has been time-tested and that it has been proven to work in both bull and bear markets over an extended period of time. It must work for any market and any time chart. Most definitely, it must not be based on curve fitting for a specific market, or for a specific time period.

Beware of a "specially designed program" that is working very well for a particular market and a particular time interval (such as a system that only works for a Euro

Forex 30-minute chart). There is a very high likelihood that the program is curve-fitting the historical data set. That means it may work great on past data, but there is no assurance it will work in future changing conditions. You need to select a system that works in any market and any time interval so that the software vendor doesn't even have the opportunity to curve-fit the data and try to make the software look better than it is.

Trading with Confidence and a Plan

You cannot win if you don't have *confidence* in your trading system.

How do traders gain such confidence? Basically, there are four steps of trading system validation. These are:

1. Back-testing with historical data.
2. Historical forward testing (or trading simulation) with historical data.
3. Virtual paper trading in real time.
4. Real trading in real time.

The system performance reports generated by a trading system software package give traders confidence to trade. They give an idea in advance of what can be expected for net profit, maximum drawdown, average drawdown, profit factor, win/loss ratio, number of trades, winning rate, and so forth. In addition, they can also approximate how much risk capital a trader needs to trade the system. Without such data, it would be impossible to formulate a logical trading business plan. Essentially it would be like gambling, purely dependent on luck.

Only "real trading in real time" is real. As Jesse Livermore said, "The only way you get a real education in the market is to invest cash, track your trade, and study your mistakes" (Livermore and Aligood 2001).

You should now have a good idea of what you should look for in choosing a trading system that fills your need. The next major element for successful trading involves ensuring you have the required capital to trade effectively.

ADEQUATE CAPITALIZATION

Before making a business plan for trading, you need to identify your profit goal, have your funds ready, and establish the right account size. Trading is a game that uses money to make money.

One of the most memorable events to shake the trading world over the past 20 years was the failure of the United States–based hedge fund Long-Term Capital Management (LTCM) in early 2000. LTCM was founded in 1994. The distinguished members of its board of directors included economic luminaries who shared the 1997 Nobel Prize in

Economic Sciences, and many other professors of Harvard, MIT, and Stanford Universities. Initially LTCM was enormously successful, reporting annualized returns of over 40 percent (after fees) in its first years. But this rosy picture did not last long. In 1998, it lost $4.6 billion in less than four months following the Russian financial crisis, and it became a prominent example of the potential risk in the hedge fund industry.

As was soon discovered, the fund took highly leveraged positions to make its significant profit. At the beginning of 1998, the firm had equity of $4.72 billion, while it had borrowed over $124.5 billion with assets of around $129 billion. This meant they had an unstable debt-to-equity ratio of about 25 to 1. The firm had off-balance sheet derivative positions with a notional value of approximately $1.25 trillion, most of which were bond futures. If everything acted exactly as they predicted, they were able to keep the whole thing afloat. However, in the trading world, anything can go wrong. After the 1997 Asian financial crisis and the 1998 Russian financial crisis, LTCM suffered a huge loss and had to liquidate a number of its positions at a highly unfavorable moment, causing it to suffer further losses.

Thus history tells us how important it is to have adequate capitalization. One safe rule of trading is to never "over trade." However, most hedge funds cannot follow this rule. They must be as highly leveraged as possible in order to bring in the big profits, and there are big risks involved.

As traders, we are aware of these issues, and we have developed money management software to help traders avoid these problems. This will be addressed further on. We look first at some important issues for ensuring that traders have sufficient funds available.

Adequate Capitalization Formulation

Concept of Drawdown and Maximum Drawdown Drawdown—a reduction in investor capital due to losses—is an inevitable part of trading, regardless of the trading system used. No one can trade with 100 percent accuracy. Successful trading requires only that profits from winning trades outpace the losses from losing ones. Any trading system might have a few consecutive losing trades, which will cause drawdown in account equity. Maximum drawdown (MDD), the largest loss experienced by a system during a specified period of time, can occur in a choppy market. Sometimes a trading system might have a few consecutive losing trades (for example, five consecutive losing trades). These losing trades will cause drawdown in account equity. But bear in mind that the MDD of a trading system may or may not be represented by a streak of losing trades. MDD could, in fact, occur during the course of many trades, both losing and winning, with the overall result being a large loss.

Traders must maintain adequate capitalization if they are to sustain the occasional MDD. Here is a suggested formula for determining how much money should be held in an account to cover a particular trade:

$$\text{Initial Account Balance} = \text{Margin requirement} + (1.5 \times \text{MDD}) \tag{3.1}$$

Drawdown Is an Unavoidable Cost of Running a Trading Business When starting any business, it is necessary to plan for and accept all the necessary costs. It wouldn't make sense for a new business owner to say, "I wish I didn't have to buy inventory," or "I wish I didn't have to lease office space." These are costs one must shoulder if one wants to be in business.

Likewise, in trading it makes no sense to say, "I hope I don't have any losing trades!" Losing trades are inevitable. The fact is, in trading, there is no way to project how much profit one will make, and one must be prepared for losses. Fortunately, there are methods traders can use to give them full control of how much they might lose. These involve exiting losing trades early so that drawdown is minimal. We will look at these methods later in this book when we discuss stop placement.

Accept Drawdown as Inevitable To believe that you can pick only winning trades is wishful thinking. Such a feat would be impossible. Making new highs in the equity curve only occurs during a very short period of time. All trading systems spend 80 percent of the time in some sort of drawdown after reaching the occasional high. (See Figure 3.2.)

However, as a system trader it's not your job to guess whether a trade will be a winner or a loser while you are following your trading signals. Your job is to recognize

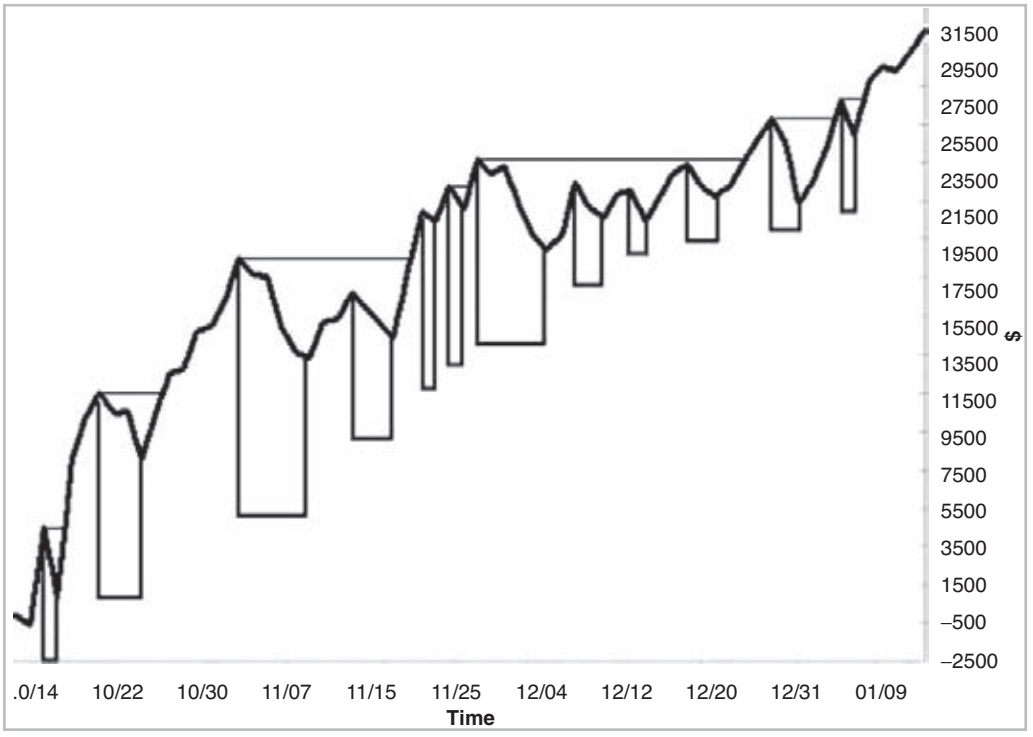


FIGURE 3.2 Account equity line spends 80 percent of the time in some sort of drawdown after reaching the occasional highs. The time duration of a drawdown is a killer to many traders.

the signals and execute them well. Losses can be a planned expense of your trading business. Your account size should be prepared ahead of time to handle the contingency drawdown—even maximum drawdown.

Take the Long-Term View to System Trading By taking the long-term view, a system trader can remain optimistic even as the system experiences a period of drawdown. When drawdown is understood to be merely transitory, it won't discourage a trader's faith in his proven strategies. Trading is about winning over time by gradually building a growing equity curve. Day-to-day trades are only part of a much larger picture. If you will be unhappy unless your system is constantly showing a profit, then consider that system trading might not be appropriate for you.

Risk Only the Capital that You Can Afford to Lose Risk capital is the money that you can lose and still maintain your lifestyle. Don't ever trade with capital that you need to live on. The market takes scared money.

Commitment

Trading is a business, and it requires a serious commitment. Commitment is necessary for any great success.

Commit with an Understanding of the Nature of Drawdowns Once you have verified that a system works for the most part, you should be comfortable with the drawdown. By knowing that a trading system will win over time, you should be willing and able to tolerate losses. With the knowledge that losses are part of the system-trading process, fear should no longer be an issue and will be replaced with confidence.

Have Sufficient Capital A system trader needs to have sufficient capital available. As stated earlier, in order to sustain the maximum drawdown, the initial account balance can be referred to Equation 3.1. This is the margin requirement plus 1.5 times of the MDD.

Be Persistent after Consecutive Losing Trades Experienced system traders are persistent in taking trades after consecutive losses. Some traders even purposely start to trade after consecutive losses, because they know that drawdowns are usually followed by periods of large profits for a winning system.

MONEY MANAGEMENT STRATEGY

We now come to the third critical element for successful trading. It may not occur to many traders, but knowing how much money to put into a trade, and how many positions to open, is as important to success as knowing the direction in which a market is moving.

Legendary trader Larry Williams comments on money management this way: "Money Management—The Keys to the Kingdom. Here it is, the most important chapter in this book, the most important chapter in my life, the most valuable thoughts I can transfer from me to you" (Williams 1999).

First, I must say that it is exceedingly educational and fun to read Larry's book. In addition, I cannot agree more with Larry's comments. Go through this section, and I trust you will come away with a deeper understanding of how critical this issue is.

First Story about Money Management

Here is the first story I ever heard that illustrated the importance of money management:

Imagine that there once was an unbelievable blackjack player whose winning rate was 99 percent. His method of playing was to double his bet each time he won. He always bet his full bankroll.

Question: One evening he started playing with $1. How much would he win at the end of the night?

Let's say he was very lucky and won the first 99 games.

- After the first game, his money was doubled from $1 to $2.
- After the second game, his money was doubled from $2 to $4.
- After the third game, his money was doubled from $4 to $8.
- And so on . . .

One would imagine that he was certain to make mega money. When you were a child you might have figured out the answer to this popular riddle: If you started with a penny, and then doubled it each day, how much would you have at the end of 30 days? The answer is staggering: over $10 million! Well, that's how quickly our gambler's winnings added up. He kept betting, and on his 99th hand, he was sitting with an unimaginable amount, over six hundred thousand trillion trillion dollars, or $2^{99} = 6.338 \times 10^{29}$.

Alas, without any money management system, on his 100th bet he doubled again, betting his entire bankroll. And when the inevitable loss finally came, he was back to zero. He did not even have the one dollar he started with!

Of course, this anecdote is hyperbole, but it illustrates the importance of money management. Without a scientific system of money management, there is always an imminent danger that the next trade will be the big blow that wipes out months, or even years of successful trading.

Many people believe that simply achieving a high winning rate will guarantee them success in the markets, and they disregard the importance of money management. But without attention given to money management, one is certain to fail. This story tells that even for a 99 percent winning game, you still need a scientific money management strategy.

Money Management (MM) is not the same thing as Risk Management. Risk Management normally refers to the use of protective stops during a trade. On the other hand,

Money Management deals only with "trading size." Here the trading size means the number of shares for stocks, or contracts for futures and Forex.

A good, scientific MM strategy can help a winning system to yield much larger profits. However, MM is not a trading system and cannot turn a losing system into a winner. MM does not deal with entry or exit rules (signals). It only calculates the trading size of the next trade based on your current account balance. Therefore, you must first find a winning trading system before applying the MM strategy.

Because of the importance of money management, I incorporated a state-of-the-art Money Management formula as an option to AbleTrend. We have modified the Ryan Jones's "Fixed Ratio" strategy (Jones 1999) for our MM routine to calculate optimum trading size. The routine uses AbleTrend system equity line data or a trader's manually input data to run the calculations and then output the appropriate trading size for the trader's current account.

Significance of Using the MM

It is not out of line to say that proper money management could help a trader turn $10,000 into $1,000,000, or $2,000 into $60,000. While making improvements in technical analysis to a system could increase profitability by perhaps 5 to 20 percent, using money management could improve system performance by 100 percent, all the way up to 2,000 percent.

Do You Need MM for Your Trading? It depends what your goal is for trading. Which of the following characterizes your main reason for trading?

- Trading for a living
- Trading for a hedge
- Trading for fun
- Trading to become rich

If you are trading for a living and hope to make $50,000, you may or may not need MM. If you are trading for a hedge (for example, you are a farmer trading corn futures to protect your profits from your crop), you would not use MM, because you need to exactly calculate the size of your trade based on hedge purpose. However, if your goal is to have fun or become rich, then money management strategies are a must. Otherwise, you will simply have no way to fulfill your goals!

We will not cover exact formulas for money management in this book due to the space limitation, but the basic principle is simple: If your trades are winning and your account balance is going up to your desired level, you need to trade more contracts or shares. However, if your trades are losing and your account balance drops toward a level, you need to be more aggressive about cutting down your trading size. The commonly used process of "averaging down" is a big no-no according to the MM principle.

AbleTrend has a built-in money management (MM) module to deal with the trading size. It can calculate the correct contract size for any market, including futures, Forex, or shares of stock. I would now like to share two real stories comparing results with and without MM.

The first story involves Larry Williams, author of *How I Made One Million Dollars* (Williams 1979). In one of his books he relates how he turned $10,000 into over $1,100,000 in one year trading commodities. As he explains it, without principles of money management, it would have been impossible. I was fortunate to study from Larry, and it was he who introduced me to system trading, money management, and its importance to successful trading.

My second story is also true. In 2002, our company received a phone call from an AbleSys client. He traded E-mini S&P 500 futures and lost $1 million in about one month. I asked him what happened. He said that he used ASCTrend to turn a $20,000 account into $1 million in a few months by trading more and more lots (contracts). There were times when he traded 100 contracts per trade. That was when he was experiencing his good times in trading. However, there are always bad times in trading. When the bad times came, he gradually began having big losing trades, and he saw his account balance go down and down. However, he didn't know anything at all about money management. Instead of decreasing the size of his trades, he significantly increased the lot size. When he was in a losing trade, he doubled or tripled the trading contracts to 100 contracts per trade. After a few consecutive losing trades, his account dropped from $1 million back to $20,000. It all happened in just one short month. As this cautionary tale illustrates, traders who do not know how to use scientific principles of money management to determine the proper trading size can begin losing money very quickly.

I was so impressed with the significance of proper MM—one report showed without MM the profit was $600,000, but with MM the profits went up to $20 million—that I went on to build MM into AbleTrend. I developed computer routines based on standard formulas, and traders only need to enter certain basic information into a handy online form to determine their appropriate trading size. These are described in more detail further on.

An innovative Money Management Calculator has also been created by AbleSys. It is associated with any chart that Money Management is enabled on. With this feature, subscribers can now receive the optimal trading size information at the click of a button. We will look at this in "MM Calculator" (see p. 77).

Requirements for Applying the MM Strategy In order to take advantage of the MM strategy, traders need to start with a winning trading system that fulfills the following requirements:

- A winning system with Profit Factor > 1.50.
- Lower Max Drawdown (MDD), < 1/4 of initial account balance.
- Higher winning rate, > 60%.
- More number of trades in certain time period.
- EXP Index > 1.

Here,

- Winning Rate = (Winning Trades / Total Trades) × 100%.
- Win/Loss Ratio = Avg. Winning Trade / Avg. Losing Trade.
- Profit Factor = Gross Profit / Gross Loss.
- EXP Index is an overall factor to evaluate a trading system. You may refer to the book of Ryan Jones (1999).

$$\text{EXP} = [(1 + \text{Win / Loss Ratio}) \times \text{Winning Rate}] - 1 \tag{3.2}$$

EXP = 0 means the trading system breaks even.
EXP > 0 the trading system is winning.
EXP > 0.5 the trading system is tradable.

The bigger the number, the better the performance. The EXP index is mainly used to evaluate whether a trading system is suitable for using with Money Management or not.

Sometimes it is hard to find a trading system that meets all of the foregoing requirements. It is fine if the system misses one or two of these conditions. For the purposes of MM, net profit value without MM is not very important. As long as your system meets these requirements, the MM strategy will significantly increase the net profit along with the trading process.

Now we will go on to discuss the five factors input to the MM calculator, which determines the appropriate trading size.

Major Factors Affecting Money Management

If you find it too technical or complicated for you, you may ignore the money management part, and go directly to the next section.

Five major factors for considering the MM are: (1) maximum drawdown, (2) account start balance, (3) shares or contracts per unit, (4) rate of risk increase, and (5) rate of risk decrease.

Max Drawdown Max drawdown (MDD) or maximum consecutive drawdown(s) in the account equity (balance) represents the worst losing period tested or traded over a given amount of time.

Drawdown and MDD values can be found in the back-testing report that follows. For example, the MDD was $6,780 in the testing report presented in Figure 3.3, which represents the EUR/USD, chosen for illustrative purposes.

Account Start Balance Start balance is the initial account balance in dollars ($). This requirement is based on the initial margin requirement and maximum drawdown (MDD).

Here is a suggested formula for calculating start balance:

$$\text{Margin requirement} + (1.5 \times \text{MDD}); \quad \text{also refer to Equation 3.1.}$$

Performance Summary: All Trades
(For EUR A0-FX Form 04/02/07 to 04/02/08)

Total Net Profit	$20149.9785	Buy/Hold Net Profit	$20855.0012
Total % Net Gain	14.83%	Buy/Hold % Gain	15.35%
Max/Avg Draw Down	$6780.0117 / $1472.8059	Buy/Hold Max Draw Down	$6569.9922
% Max/Avg DD vs. Net Profit	33.65% / 7.31%	% Buy/Hold Max DD vs. Profit	31.50%
Gross Profit	$25675.0000	Total Trades	12
Gross Loss	($5525.0215)	Winning Trades	7
Avg win/Avg loss	3.319	Winning Rate	58.33%
Profit Factor	4.647	AbleSys/EXP Index	8.998 / 1.520
Avg Winning Trade	3667.8571	Consecutive Winning Trades	2
Avg Losing Trade	(1105.0043)	Consecutive Losing Trades	2
Avg Trade	$1679.1649	Avg Holding Bars	20
Largest Winning Trade	$8595.0000	Avg Winning Bars	15
Largest Losing Trade	($2045.0137)	Avg Losing Bars	4

FIGURE 3.3 Back-testing report without Money Management for the EUR/USD daily chart from 4/2/2007 to 4/2/2008. For example, the MDD here was $6,780. Net profit is $20,149.

For example, for EUR/USD Forex trading, if the initial margin requirement is about $3,000, and the trading system's tested/traded MDD is rounded to $7,000, you will need to have a start balance of at least $13,500 (i.e., $3,000 + 1.5 × $7,000).

Or, if you are trading 500 shares of IBM stock priced at 100.00, if the initial margin requirement is $25,000 (50 percent of the equity value), and the trading system's tested/traded MDD is $10,000, you will need to have a start balance of at least $40,000.

Shares or Contracts per Unit Shares or contracts per unit defines the number of shares (for stocks) or the number of contracts (for futures) to be added or taken away as your account balance increases or decreases by a certain amount. The "fixed ratio" algorithm allows you to increase or decrease one unit position. In the "fixed ratio" Money Management algorithm, the position (shares/contracts, or trading size) will be increased or decreased as a unit once the account equity is above or below certain equity thresholds.

For example, for futures trading, the commonly used "contracts per unit" is 1. This means that when your account equity increases to above a certain threshold, you are entitled to trade one additional unit, in this case, one more contract. So, if initially you traded one contract, now you can start to trade two contracts. Inversely, if your account equity decreases by a certain threshold amount, you will reduce your position by one contract. For example, if you were trading three contracts at the time this occurred, you would begin to trade two contracts. If you wish, you can change the size of the unit (for example, you can change the contract per unit from 1 to 2). After making that change, you would add two contracts when your account equity increases to a certain threshold.

Here's another example in stock trading, where the commonly used shares per unit is 100. If your account equity increases by a certain threshold amount, you are entitled to trade one more unit, or an additional 100 shares. If initially you trade 500 shares, now you will start to trade 600 shares. Inversely, when your account equity decreases, you need to cut back one unit or reduce shares traded by 100 shares. If you are trading 800 shares at the time a certain threshold level is reached, you will now trade 700 shares. The shares per unit are in increments of 100.

Rate of Risk Increase Rate of risk increase (RRI) defines the dollar amount used for increasing a unit to trade. Here, RRI is equal to the account equity increase for the first trading unit increase. It is also called Delta in money management.

For example, a commonly used RRI is set to be one-half (1/2) of the maximum drawdown. For trading S&P 500 futures, if the MDD is $20,000, you may set RRI at 10,000 (1/2 of MDD). If you are trading one contract and the trading account balance increases by $10,000, you will start to trade one more contract. Please note, RRI is for the first trading unit increase only. The money management routine will automatically calculate the second, third, fourth . . . unit increase based on the RRI value.

There are a few predefined RRI options to choose from:

Aggressive	RRI = 1/3 of MDD
Moderate	RRI = 1/2 of MDD
Conservative	RRI = MDD
Manual Input	RRI = your set number

The default setting is "manual input." AbleTrend subscribers must double-check their account balance to see that they have enough account equity to meet the first few trading size increases. Normally, the third or fourth trading size increase level is critical.

Rate of Risk Decrease Rate of risk decrease (RRD) is defined and expressed as a percentage of equity gap (RRI × unit number) between two equity thresholds for position increase. It gives guidance to decrease the trading position if the account balance drops below the amount of (RRD × RRI × unit number). Here, the "unit number" is defined by the number in column 1 of the Reserve Calculator of the MM dialog box. (See Figure 3.5 for details.)

Here are a few predefined RRD options to choose from:

Aggressive	RRD = 100%
Moderate	RRD = 75%
Conservative	RRD = 50%
Manual Input	RRD = your set number

The RRD default setting is 50 percent. It is not necessary to spend too much time learning the details of these calculations. The default value (risk to reward) does a good job under most conditions.

MM Calculator

Trading size is the result—number of shares for stocks, or the number of futures contracts to trade. With its money management algorithm, the AbleTrend software will automatically calculate the proper trading size for a subscriber's next trade based on the current account balance.

During a trade process we don't change (add or reduce) trading size. We have to wait for the current trade to finish, then decide the trading size for the next trade.

The Money Management (MM) Calculator, shown in Figure 3.4, quickly provides the correct trading size for a particular trade. For added convenience, the trading size number will be automatically filled in on the order entry form if the subscriber selects "Auto Order Execution" (AOE). We will talk more about AOE in Chapter 7. This is a real innovation created by our software team at AbleSys.

For example, a commonly used RRD is 50 percent, which is the default value. For trading NASDAQ 100 futures, see Figure 3.4, the illustration of the MM Calculator. If the initial balance = \$50,000, RRI = 10,000, and RRD = 50%, we will be able to trade two contracts when the account balance is above \$60,000 (first threshold for unit position

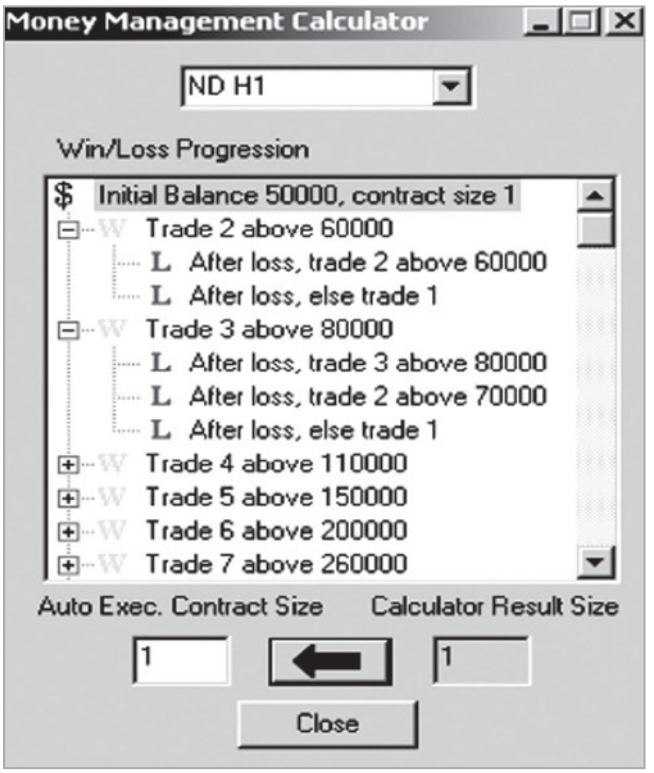


FIGURE 3.4 MM Calculator. The "W" stands for a winning condition and the "L" stands for a losing condition.

increase, \$50,000 + \$10,000 × 1 [RRI × unit number]); we will be able to trade three contracts when the account balance is above \$80,000 (the second threshold for unit position increase, \$60,000 + \$10,000 × 2 [RRI × unit number]). When we are trading three contracts, if there is a losing trade and the account balance is still above \$80,000, we can still trade three contracts. If the account balance drops to below \$80,000 but is above \$70,000 (i.e., \$80,000 – 0.5 × \$20,000), we can trade two contracts. If the account balance drops to below \$70,000, we can trade only one contract. In essence, this means that we will be decreasing our positions (risk) much faster than we will be increasing them. This is how we preserve our capital when drawdown occurs so that we still have more equity to leverage when the system starts to make money.

Reserve Calculator

The account Reserve Calculator is designed for calculating the account balance that a trader is required to maintain for a specific trading size (contract size of futures or shares of stocks). Subscribers input the value of "Per Share/Contract Equity" which is the initial margin requirement for one share of stock or the initial margin requirement for one futures contract. For example, if trading one share of a \$100 stock, the Per Share/Contract Equity is \$50 (50 percent of the cash value). If trading one contract of Euro Forex, the overnight initial margin requirement is \$3,000. (See the following example in Figure 3.5.) The calculation results will be filled in each cell of the Reserve Calculator.

Initial Trading Size (Contract Size) is input from the Format Trade Signal dialog box. In this example, the Contracts per unit is 1 (contract or share).

In Figure 3.5, we use a trade with the EUR/USD daily chart as an example.

- The first column is the unit to add (increasing).
- The second column is the number of shares or contracts to trade (S/C to Trade): 1, 2, 3 . . .
- The third column is Equity (\$) requested by trading 1, 2, 3, . . . units, which was defined earlier in the dialog box by the "Shares/Contracts per unit " field. For example, it's \$3,000 when trading one contract (shares), \$6,000 when trading two contracts (shares), \$9,000 when trading three contracts (shares), and so on.
- The fourth column is n × RRI value. Here the n is the number in column 1. It is also called threshold gap. In this example, the RRI is \$3,500 (also called Delta).
- The fifth column is the "Threshold for Increase" Contract Size. As illustrated earlier, one would start trading two units if account equity goes above \$13,500, three units if account equity goes above \$20,500, and four units if account equity goes above \$31,000.
- The sixth column, Reserve, is very important. It indicates how much cash reserve is still in the account for purposes of proper money management. For example, here, while trading one unit, the account cash reserve is \$7,000 (initial balance = \$10,000). While trading two units, the account cash reserve is \$7,500 (account balance = \$13,500). And, while trading three units, the account cash reserve is \$11,500 (account balance = \$20,500), and so on.

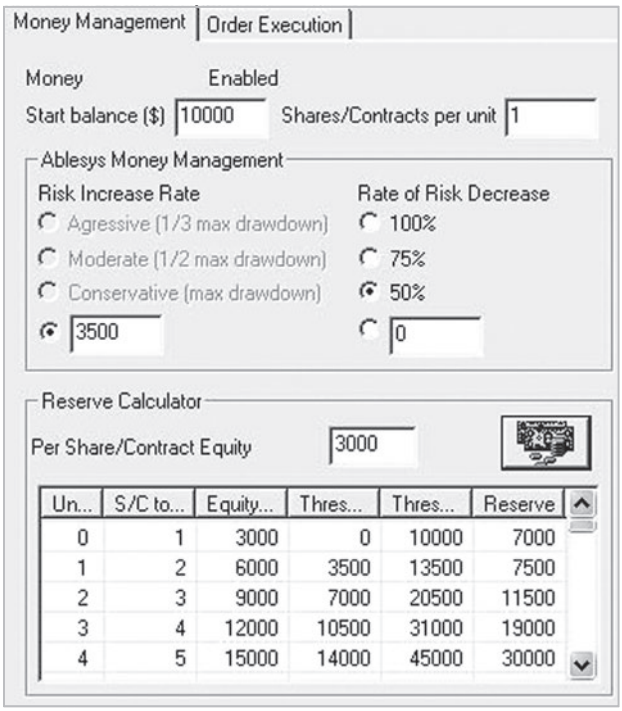


FIGURE 3.5 Example of Money Management interface and cash Reserve Calculator (the sixth column) for Forex trading.

Traders must pay attention and watch out for a "0" or negative value in the Reserve cells (the sixth column). Zero or negative reserve means there is not enough equity (i.e., money) in the account to trade such units (shares or contracts). It is necessary to recalculate a new money management strategy by using one of the following four ways to avoid zero or negative cash reserve:

1. Increase the start balance
2. Increase the rate of risk increase (RRI).
3. Decrease the contract size.
4. Decrease the shares/contracts per unit.

The preceding example is a demonstration for futures. In fact, the MM we developed is not limited to futures; it is universal and can be applied to Forex, stocks, bonds trading, etc. Due to space limitations, we won't discuss them in detail here.

MM Back-Testing Report

Since the MM works with the AbleTrend's mechanical trading system, back-testing reports with or without MM can be easily compared. An example of the Money Management Back-Testing Report can be seen in Figure 3.6.

Performance Summary: All Trades for Money Management
(For EUR A0-FX Form 04/02/07 to 04/02/08)

Total Net Profit	$38375.0039	Buy/Hold Net Profit	$20855.0012
Total % Net Gain	28.25%	Buy/Hold % Gain	15.35%
Max/Avg Draw Down	$20340.0234 / $2891.3782	Buy/Hold Max Draw Down	$6569.9922
% Max/Avg DD vs. Net Profit	53.00% / 7.53%	% Buy/Hold Max DD vs. Profit	31.50%
Gross Profit	$50510.0010	Total Trades	12
Gross Loss	($12134.9971)	Winning Trades	7
Avg win/Avg loss	2.973	Winning Rate	58.33%
Profit Factor	4.162	AbleSys/EXP Index	7.219 / 1.318
Avg Winning Trade	7215.7144	Consecutive Winning Trades	2
Avg Losing Trade	(2426.9994)	Consecutive Losing Trades	2
Avg Trade	$3197.9170	Avg Holding Bars	20
Largest Winning Trade	$25784.9883	Avg Winning Bars	15
Largest Losing Trade	($6135.0156)	Avg Losing Bars	4

FIGURE 3.6 Back-testing report with Money Management for EUR/USD daily chart 4/2/2007 to 4/2/2008. Compare these results with Figure 3.3 (without MM). The net profit increased 90 percent, from $20,149 to $38,375.

More on Money Management

I used fewer than eight pages to cover the key calculation method of the MM, while other authors use 300 to 500 pages to explain the concept. If you don't understand, that's fine. You only need to remember which five factors are used and their meaning. You may develop your own Excel MM calculator worksheet from our eight pages of information. If you are interested in this topic, you may start with two books that are excellent resources on the topic of money management strategies for trading.

- *The Trading Game: Playing by the Numbers to Make Millions* by Ryan Jones
- *The Mathematics of Money Management* by Ralph Vince

Both books focus on money management for commodity and futures trading. I had met Ralph Vince at Larry Williams's workshop and studied his software. I met Ryan Jones at our office in 2000. We had long discussions on the MM topics, and he helped us to verify the MM calculations.

DISCIPLINE OR A WINNING TRADING PSYCHOLOGY

We now come to our fourth element for successful trading. Discipline is an essential quality that traders must have. A successful trader once said: "Winning trades are the result of controlled emotions and the courage to take intelligent risks." Whether you are

doing discretionary trading, or you're following some version of system trading, you must have the discipline to follow the rules that you have predefined.

Even the most winning trading methods or systems cannot guarantee that you will win. Successful trading is the combination of the four elements we discuss in this chapter. When it comes to this fourth element, discipline, traders must become aware of their own possibly self-defeating behaviors. One of the major jobs of any trading school or "university" is to train its students in the psychology of trading. Through self-awareness traders can develop discipline.

In order to be a disciplined trader, you must only trade price actions and patterns that fit your strategies and rules. Not all price actions are tradable. Out of their eagerness to trade, or their fear of experiencing losses, traders may be tempted to act impulsively, and contrary to the rules of their system. This can lead to big losses for undisciplined traders.

As we all know, trading is a game where the trader sets the rules instead of the house. As a trader, you need a business plan built around trading strategies that can be implemented using specific rules. Since the array of possible market price patterns is unlimited, it is impossible to come up with strategies and rules that will fit every conceivable market price action. There are bound to be some actions that your system cannot handle. If you are consistently trying to adjust your strategies and rules to fit every new price pattern, you eventually become a rule-less trader without any discipline. It is inevitable that your trading strategies and rules will fit only certain market price actions. If market price actions do not fit your trading strategies and rules, do not trade.

You need to patiently wait for the unique price patterns to appear that you are prepared to trade. Do not be concerned about missing out on some moves. You will always have more opportunities in front of you. The market constantly alternates between narrow range price consolidations and large range price movements; the ratio of price consolidations to price movements is approximately 80:20. Experience has shown that during price consolidations it is not appropriate to initiate trend-following trades. Many experienced and successful traders report, however, that they have very good success when they take the entry point at the END of a price consolidation. That is why we must be patient and very selective.

You should only enter a position at the optimal entry point. AbleTrend users have an advantage in meeting this requirement. The AbleTrend software has a unique approach to presenting colored indicators with simple rules and sound alerts so that traders can follow the program easily. The details are discussed later when we look at the Simplified Trading Method (STM) in Chapter 5.

Another critical aspect of trading is knowing when to exit a position. Your dynamic trailing stops are the only way to manage your risk. Again, the AbleTrend software helps traders to manage their current open positions by offering very specific initial stops and trailing stops.

To trade safely, you need to spread out your trading risks by diversifying your account allocation and strategies whenever you can. If you trade stocks, you will reach optimum per-symbol buying power by dividing your usable buying power across a number of

symbols. You will arrive at the best number of shares by further dividing the per-symbol buying power by the price of the symbol. If you trade E-mini, futures, commodities, or Forex, it is always a good idea to mix different markets or mix different trading styles.

You always need to put aside 20 to 30 percent of your buying power as a reserve. Every trading system and strategy will have periods of drawdown. You need to have sufficient reserves in order to sustain yourself through these times.

Please note that trading is a long-term game. You need a plan and you need to have patience. An "instant gratification" mentality will cloud your judgment.

You need to learn to walk before you can run. Learn all the rules and strategies of your system first. Then practice or simulate trades before you trade with real money.

Over the years I have proved for myself the validity of the following general trading rules for trend-following methods.

Buy on Price Strength and Sell on Price Weakness

One of the predominantly accepted concepts in trading is "buy low and sell high." It seems simple enough (easier said than done), but it is an arbitrary concept. A trend is not a trend until it is under way. Using the AbleTrend software in trading you must be willing to buy on price strength and sell on weakness. Good traders take advantage of direction and duration, not on the arbitrary concept of "cheap" or "expensive" prices. So the phrase "buy low and sell high" may be modified for our purposes to "buy high (on price strength) and sell higher" and "sell low (on price weakness) and buy lower." To follow the true direction of a trend one must possess a comfortable grasp of this concept.

One big difference between professional traders and novice traders is that professional traders can and are willing to buy or buy more when the market price is up (or higher), and to sell or sell more when the market price is down (or lower). They do what the market is telling them to do. Novice traders tend to go the opposite way. They try to buy when the price is "cheaper," and try to sell when the price is "expensive." This is the way we are normally trained to behave, and how we act throughout our lifetime. But it is not always the best approach for making consistent profits.

Be More than Willing to Take Small Losses

In the real world, don't believe it when someone says that he or she knows the direction a market will take ahead of time. In fact, there is no one who knows. Everyone is just acting on his or her best knowledge at the moment when entering a trade.

In trading, there is not anything that is for sure except for one thing. While we cannot predict (or control) how much we will win at the time we enter a trade, *we can always know (or control) how much we might lose in the trade.* And here again, AbleTrend helps traders keep losses within acceptable limits. On entering the trade, AbleTrend stops tell traders the location of the key support and resistance levels (which, in turn, define the stop values). Therefore, among many uncertainties, at least we know what the

possible loss is for any trade. In fact, this is a big advantage in trading. Why do people lose big in trading? It is because they don't know where to place their stops to exit a losing trade.

In order to make big profits, you must be more than willing to take small losses. Bear in mind that "smaller" losses are a part of the overall plan of achieving "bigger"-sized profits. Without small losses, you won't be able to achieve big profits. Conceptually, AbleTrend tenaciously follows the snakelike movements of a stock or futures market, catching the breakouts early on. In some cases, these breakouts are temporary and as a result the AbleTrend trader could easily get whipsawed in such an environment. However, in the end, with clear vision we understand that when the market does truly break out, we will catch the ride and achieve our end goal of taking bigger gains as a result of what is inevitable: the trend!

AbleTrend is designed to take chances with small-calculated losses, and when a trend develops, to ride with it to achieve optimal profits. As in any successful business, small losses are a part of necessary expenses that enable you to profit in the end.

I communicate with many traders on a daily basis. Some have told me they could not pull the trigger in trading. The problem these traders have is a psychological one. They are so concerned about winning, they refuse to take a loss while it is still small. I tell these traders not to think about winning. It's too heavy for anyone to think about. If you think that way, it means that in your mind, this trade must be a winner. In fact, there is no way one can predict which trade might win. The market has its own way. Our task is simply to follow it. We make our best decision based on what we see at the moment, but if the market changes its mind, what can we do? We just might lose on this trade. If that's the case, don't fight it. Instead, think about how much you might lose in this trade, and then ask yourself if you can afford that. Thinking that way, it will be easier to pull the trigger, and gradually you will become better and better at it.

Be More than Willing to Switch Positions

One of the characteristics of floor traders is that they don't use "stops." When they see the market turn against them, they simply exit all their current positions and go the opposite way. For example, if a trader is holding a long 10-contract position, he will simply sell 20 contracts if he finds that his previous position was wrong. Being able to switch positions fast is a basic skill of winning floor traders.

To succeed in trading, we must "obey" the market. By that I mean that one must be flexible enough to follow the direction of the market as it is revealed. Do not allow any theories, methods, or predictions to limit your view of the market. Think outside the box, not inside it! *The key market indicator is the market price itself.*

As soon as we find that we are on the wrong side of a trade, we must be more than willing to switch our position. That means not just liquidating such a trade, but actually switching from buy to sell, or from sell to buy, depending on our original side. This is an essential skill of the professional trader—and a successful AbleTrend trader.

Stick with the "Big" Trend Until a Change in Trend Tells You to Exit

It is easy to take a small profit and run, but in the end you will most likely lose overall with such a trading strategy. To succeed you must go the opposite way of the majority of traders; we will discuss this idea in Chapter 4. We are willing to risk some existing profits to make even more by sticking with the big moves. AbleTrend allows us to follow such moves as long as possible by risking an "intelligent" amount of money to follow the true direction of a trend. The software will tell us when to exit and/or change the direction of our position.

Only Move Stops in the Desired Direction of the Trend

Where should we place our stops for the most protection? It's easy when we place our stops at logical levels as dictated by AbleTrend. A common mistake traders make is to arbitrarily place stops without respect to the market's price action or movement. A trader will risk arbitrary amounts such as $200, $500, or $1,000. Where do these numbers come from? They are arbitrary. In reality, market conditions vary from trade to trade, time to time, day to day, and market to market. *Nothing is fixed.* That's why traders enjoy an advantage when they let AbleTrend show them the placement of optimal stops, which are defined by the market price and action itself.

AbleTrend dynamically places and moves stops according to the market. What does the market tell us? The current price scale and range tells us the probable price range in the near future. The current price trend tells us the probable market direction in the near future. AbleTrend is designed to use the market's own predictions to place stops—or put another way, it places stops by a process of calculated reasoning.

Turn Mental Discipline into the Power to Profit

Here is an ancient Chinese wise tale with an important lesson for traders: Long ago during an archery contest, an archer was at his best when nothing was at stake. But when he was asked to wager a sack of rice, his performance went down because he was distracted by thoughts of what he might lose. When he was asked to wager an ounce of gold, his performance got even worse. Even though he possessed the same skills, his heart and mind became distracted by the fear of losing personal possessions.

Human emotion can greatly affect one's performance in any arena. Being able to control our emotions is an essential quality of successful traders.

Because psychology plays a significant role in trading, it is important to "detach" oneself from an emotional attachment to money, and look at trading as a game. Do not focus on your fear of losing money; rather, keep your focus on the game of trading itself. Turn your mental discipline into the power to profit.

Watch Movies on Your DVD Player while Markets Are Choppy

We have a client who shared with us his way of disciplining himself. He only enters trades at ideal setup points. He never chases the market. When he misses a good entry point, he just lets the market go on without him. He says, "If I don't trade, at least I will not lose." He just moves on to do something else, such as watching movies on his DVD player.

This is a good method for all of us to consider. Don't keep watching the computer monitor, desperate to make a move. Beware of trading under the influence of market impulse. Market impulse is dangerous. Remember: Discipline, Discipline, and Discipline.

There will always be good setups for good trades, so don't become obsessive over "the one that got away." And never chase the market movement after the fact. Always follow your predefined and well-tested entry and exit rules. When you are intent to enter a trade, briefly evaluate the Reward/Risk ratio. You may use STARC bands as your profit target—the reward, and use AbleTrend2 stops as your risk. You need real-time stops as guidance to help you manage your trades. The detail settings and signals are objective, so the influence of emotions and market impulses can be removed if you follow the signals with discipline.

Always Keep the Big Picture in Mind

Day trading has become very popular these days. Many day traders use very short-term interval charts such as 3-minute, 1-minute, or even tick charts. Many day traders execute from 10 to as many as 200 trades per day! Do these day traders make money? Studies show that most day traders in fact lose money. Why? One possible explanation is that the mentality and focus of many day traders are too narrow. They are thinking "inside the box" and forgetting about the big picture. These day traders are controlled by every little tick and movement on the chart. They are controlled by the noise of the market. You need to stand back to view the whole picture—the big trend, in order to catch the big moves.

CONCLUSION

To conclude this chapter, I believe that *a combination* of the four elements in this chapter is the foundation on which one can build success in trading. These four elements are: (1) a profitable trading system/method, (2) adequate capitalization, (3) money management strategy, and (4) discipline or a winning trading psychology. In my opinion, the number one issue is the profitable trading system or method. Without the core winning trading system, no matter how much money you have, or how good your money management strategy is, or how disciplined you are, you simply don't have a foundation to build the rest of the parts. I hope the concepts and methods described in Chapters 2 and 5 provide you such a platform for building success in the trading business.

CHAPTER 4

Essential Philosophy of Trend Trading

The Tao that can be told is not the eternal Tao.

The name that can be named is not the eternal name.

The Tao is both named and nameless. As nameless, it is the origin of all things; as named, it is the Mother of tens of thousands of things.

Ever desireless, one can see the mystery; ever desiring, one sees only the manifestations. And the mystery itself is the doorway to all understanding.

—Verse 1, *Tao* by Lao-tzu

Beyond all the natural sciences and all the social sciences there lies another level of inquiry: philosophy. Distinguished from other approaches, philosophy addresses our questions about the world by its reliance on reasoned argument to reach a deeper understanding of the surface manifestations we observe. Philosophy doesn't stop at the level of what happened; it asks why it happened.

This chapter presents the essential philosophy that underlies trend-following trading methods. Therefore, you will read many "why's" in the following pages.

WISDOM OF THE TAO

What Is Tao?

Lao-tzu was a Chinese philosopher who lived some 2,500 years ago. He was an imperial bookkeeper in the ancient capital, Luoyang. Tired of seeing the continual chaotic wars during this militant period, Lao-tzu decided to escape to the desert. When he arrived at the Hanku Pass, the last pass to the western desert, Yin Shi, the gatekeeper, knowing of Lao-tzu's reputation for wisdom, begged him to write down the essence of his thoughts. After working through the night, Lao-tzu gave the verses he had created to the

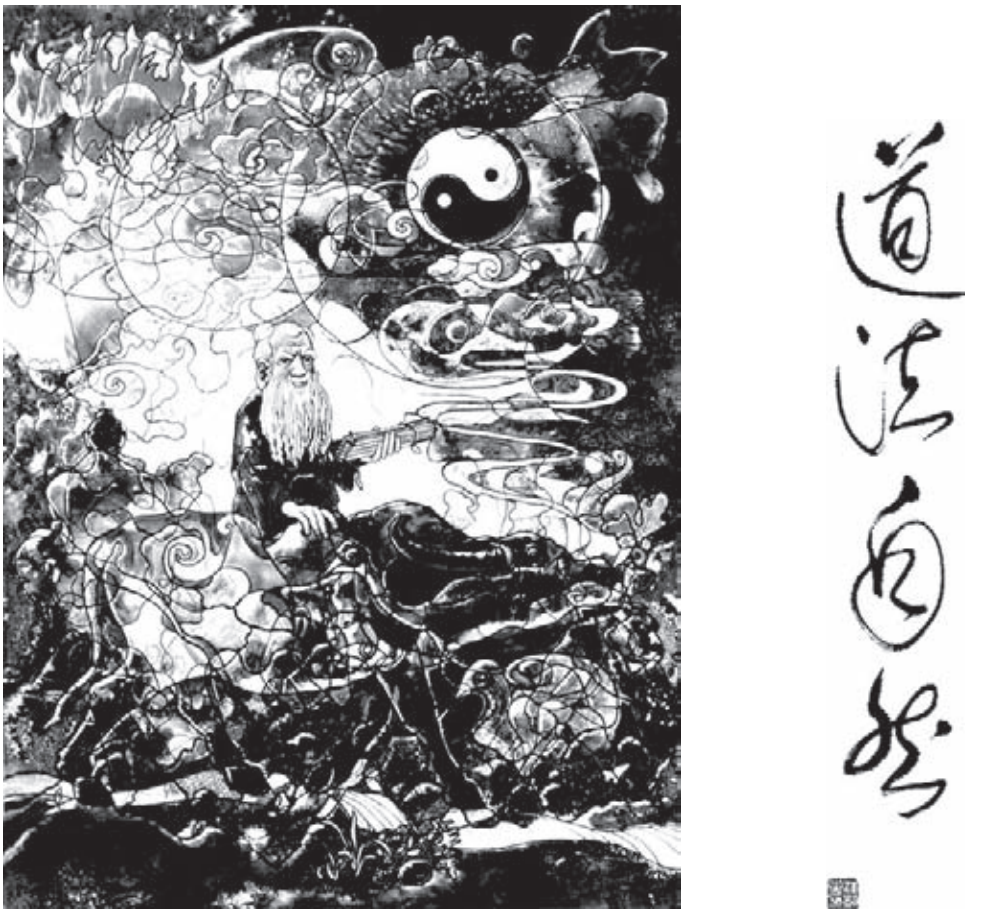


FIGURE 4.1 Tao must follow the ways of nature.
Painting and calligraphy by Victor K. Wang (1934–), my brother, a fine artist who lives in Seattle, Washington.

gatekeeper, and then disappeared into the desert. He was never seen again. But the book he left behind became an ageless classic known as the book *Tao Te Ching* (the title means "bible of the Tao"). It is made up of 5,000 Chinese characters in 81 verses. The *Tao* is considered by many scholars to be the wisest book ever written. The word "Tao" did not exist before this. Lao-tzu said he didn't know how to exactly name his philosophy. "If we must give it a name," he said, "let's call it 'Tao'."

As a scientist and a trader, trained in both China and the United States, I am always so amazed by the essential philosophy of the Tao. At the opening of the Tao, Lao-tzu stated that the world was born at its very beginning from "none." I wonder at how Lao-tzu could have known the universe was born from "none." Today, seeing the development of the great theories and discoveries of the 20th century, such as Einstein's relativity theory, quantum theory, and the big bang theory of the creation of the universe, it is very amazing to look back at the Tao, which said essentially the same thing 2,500 years ago. Modern

science refers to "none" as a vacuum. The Tao said our universe was generated from none. Lao-tzu told us *none* and *any* existences are the same thing, but in different names or formats. For 2,500 years, people didn't know what he meant. Only with the discoveries of the twentieth century and the birth of modern physics are people gradually beginning to understand the deep meaning in the Tao's first verse.

To this day, Samuel C. C. Ting, a 1976 Nobel Prize laureate in physics and MIT professor with $700 million in funding from NASA, is still leading a team of a few hundred physicists and astrophysicists in Geneva, Switzerland. They hope to find or discover the "none" or "negative materials" before or after the "Big Bang" 15 billion years ago.

By absorbing the powerful philosophy of the Tao and imprinting it onto my consciousness, I was given the basis for the creation of AbleTrend. It enabled me to see trading and the world in a whole new way. Through years of communicating with thousands of users of AbleTrend, I found that having the best trading methods or trading tools alone may not be enough to help a trader be successful. Only after being empowered by the wisdom of the Tao as it is manifested through AbleTrend can traders take advantage of the natural law behind the markets. Through AbleTrend, traders are given the means to apply universal concepts with effortless flow. A few years ago, at our seminars, Grace talked about how to apply Tao to trend trading with the following poem. I want to quote it here. It summarized the essential philosophy of trend trading.

> Tao believes that the way of a good man is like that of water.
> He is humble and adaptive;
> He attunes his mind to what is profound.
> He sees things as they are without prejudgment;
> He follows natural law faithfully.

In this section, I want to share with you the "Wisdom of the Tao" as it relates to trading. In the remaining sections of this chapter, we will address some common questions with regard to trading and look at the deeper explanations behind the answers to them.

Trading the Great Way

In verse 34, Lao-tzu described the Tao as:

> *The great Truth is universal and it can apply to the left or the right. All creatures depend on it for life, yet it does not take possession of them.*
>
> *It accomplishes all things, but makes no claim for itself. It embraces all things under the sky, but yet does not dominate them.*
>
> *It is imperceptible and indescribable. It is always changing, and reverting the state of Nothingness. It is formless, shapeless, vague, and indefinite. Face it, one cannot see its head; pursuing it, one cannot see its tail.*
>
> *It may be considered small. It is the ultimate destiny of all beings though it is not conscious of it; and it may be considered great. Because it is never conscious of its greatness, it becomes truly great.*

These simple words contain great power. The truth is great, but also formless, shapeless, vague, and indefinite. The truth can be applied to any aspect of life to illuminate its natural flow and development. As our interest here is trading, let us see how these principles can be applied to the movement of the markets and the actions of traders themselves. We will see how the application of the Tao can create a series of trading rules that we can use to improve our understanding and elevate our level of trading success.

Follow a System that Is Universal To be successful at trading, you must follow the natural law of the market. To do that, you must first find a system that *follows the natural law*. It should not be biased according to belief, nor should it be static and inflexible in its application.

In determining the value of a system you are considering using, it is critical to verify whether the system does indeed follow the natural law. The system should be validated. Don't use any system until you complete your due diligence by determining its validity.

Through the years, we have seen a large number of trading systems that appeared to be successful for a while, and then became obsolete. Many trading systems had good results in certain markets for a certain period of time; but then they stopped working. For example, some of them worked well in bull markets but failed to work in bear markets. As Albert Einstein once said, the significant problems we face cannot be solved at the same level of thinking we were at when we created them. If a system works only in certain situations, it indicates that a limited level of thinking was used in defining the system and its scope; that same limited thinking cannot then find a solution to the problems that are sure to arise.

By contrast, a system that follows the natural law will be universal: it will apply to any market in the world, as long as it is freely traded. And this is where AbleTrend proves itself every day. Today, AbleTrend users are located around the world, in more than 60 countries and regions. Many of them trade symbols that we in the United States most likely haven't even heard of. And yet AbleTrend still works in all these markets. *AbleTrend is universal.* Whether you are trading at the New York Stock Exchange (NYSE), at the Chicago Mercantile Exchange (CME), or at exchanges in London, Singapore, Brazil, Shanghai, or anywhere else, AbleTrend works. The software has proven itself again and again. It is universal.

People have asked us, "AbleTrend has been on the market for so many years. Is it still working?" Our answer is *yes*.

"Do you have to change the algorithm all the time in order to make it work in today's fast-changing, volatile markets?" Our answer is NO. In fact, the core algorithm of AbleTrend remains the same as it was when it was first discovered.

The changes in today's marketplace are so dynamic, so relentless, and occur at such an increasing rate, that to meet the challenge of these fast-changing markets we need a reliable tool that cuts through the noise and keeps us pointing in the true market direction.

Follow the Trend, but Do Not Try to Possess It One trades the great way by following the trend, but without trying to own the position. With AbleTrend, the software

shows you the market direction with "buy on blue" and "sell on red," as well as the support/resistance levels with T2 stops, which provide small blue dots for stops for buy positions, and small red dots for stops for sell positions.

With AbleTrend's concept, everything should be objective; you take a position, but you do not own it. Instead, you are well informed about how far or how close current prices are to the support/resistance levels. You automatically know to exit the position when the price penetrates the T2 stops and remains beyond them when the price bar closes. There is no emotion involved in making these trading decisions. One does not become attached to one's market position. One acts as the market says to act in the moment.

Leverage the Global Market Trading the great way puts you in a position where you can leverage the global markets. No longer do you have to stick with just one market, or one symbol. People often must limit themselves to specific markets or symbols because they have limited access to tools that work universally. But AbleTrend knows no boundaries; AbleFeed data covers 90 percent or more of the markets around the world. It analyzes any type of market where profits can be found. As one of our AbleTrend users commented: "The current financial crisis offers the absolute best conditions for trading, lots of movement, which provides unprecedented opportunities." To take advantage of as many of these opportunities as you want to, you need software with universal applicability.

Some traders say, "I am a Forex trader," or "I am an E-mini trader. I can only concentrate on the market that I know." True, each market has its own characteristics in terms of volatility, preferable time frames, and stop ranges. But now you can use AbleTrend to study any market by doing back-testing and real-time testing to become familiar with that market and reveal its unique characteristics. Your experience with any market's behavior is enriched by back-testing. You soon become a veteran trader in that market because you have seen it in operation again and again.

With AbleTrend's universal applicability, plus its back-testing feature that lets you become familiar with the unique characteristics of any market, you now have the key to trading any freely traded market in the world. You are no longer limited to what you can trade.

Markets are always changing, but the way AbleTrend works remains the same. That gives you power. Using back-testing, you soon learn how each market you're interested in works. With AbleTrend there are no bounds when it comes to the symbols you can trade. It can be applied to any market and any time chart.

Two Opposite Elements Co-Existing

In verse 2, Lao-tzu states:

> *Under heaven all can see beauty as beauty, only because there is ugliness. All can know good as good only because there is evil.*

Thus we have the alternation of existence and nonexistence; the succession of the difficult and the easy; the comparison of the long and short, the contrast between the high and the low, the variation of pitch notes; the order of precedence and sequence.

The Sage is ever free from artifice, and practices the precept of silence. He does things without the desire for control. He lives without the thought of private ownership. He gives without the wish for return. He achieves without claiming credit for himself. Because he does not chase rewards for himself, he is always given rewards.

Figure 4.2 is a famous phrase of Tao—"None and existence give birth to each other." None and existence are the opposites, but they are co-existing, and give birth to each other.

Here is one way that the ancient Chinese philosophy of the Tao has influenced the development of AbleTrend. The Tao is most well known for its famous Yin and Yang fish image, shown in Figure 4.3.

FIGURE 4.2 None and existence give birth to each other.
Calligraphy by Victor K. Wang, used with permission.

FIGURE 4.3 Yin-Yang fish graphic. Yin means negative, and Yang means positive. Look closely at the picture and you will see that inside the Yin there is Yang, and inside the Yang there is Yin. According to the Tao, everything in the universe has two opposite elements co-existing simultaneously. If we extend the big circle to a two-dimensional graph, it represents the length of daylight time in a yearly cycle.

Examples of the opposites that we are all familiar with are fast/slow, left/right, top/bottom, east/west, up/down, hot/cold, soft/hard, simple/complicated, man/woman, black/white, positive/negative, and Yin/Yang. When the two opposite elements are brought together into a well-balanced state, there is harmony.

Likewise, two opposite elements operate in trading at any moment as well. For example, there are: buy/sell, long/short, supply/demand, bull/bear, support/resistance, entry/exit, winning/losing, profit/loss, risk/reward, emotional/disciplined, and so on.

AbleTrend tries to bring the two opposite elements into a well-balanced state. As a result, AbleTrend's identification of the market trend at its early stage, coupled with its ability to set optimal stops, allows you to be *in harmony* with the market. Enter and stay in the market when it's trending; exit the market by taking small losses when the market penetrates the T2 stops. AbleTrend does not provide arbitrary predictions; it flows with the markets and then provides buy/sell/stop signals that reflect what the market is doing. You can use it to enter and stay in the market while it's trending, and exit the market when it has penetrated key levels. AbleTrend acts in a simple way to follow the market. It shows you how to exit bad trades with small losses, while staying with a few big winning trades.

Trading with Yin/Yang Harmony We have quoted the following verse in Chapter 2: "None gave birth to one; one gave birth to two; two gave birth to three; three gave birth to the multitude of things, which attain the state of harmony when the opposite elements of Yin and Yang are mingled in a well-balanced manner." In fact, Lao-tzu used "zero" instead of "none" in his Tao. Here, the "none" means zero, or origin, or truth, or Tao. The "one" means "chi," or existence, or a well-mixed state. The "two" means the Yin and Yang. And the "three" means the Yin/Yang and their harmony. Not everyone can truly understand what the Tao is. A funny thing is that there are only 5,000 Chinese characters in the Tao; however, there are more than 5,000 books to explain the Tao in the Chinese edition alone through 2,500 years.

Opposites coexist in markets and trading. There cannot be winning if losing does not coexist. Markets have periods of trending only because there are times when markets are trendless. At the same time, one might consider a sideways-moving market to be in a kind of trend—a sideways trend. Thus, an uptrending market is the opposite of a downtrending market. And a trending market—either up or down—can be considered the opposite of a sideways-moving market. Trend and sideways are the same things, but in different form.

There is always an interplay of opposites, and to be successful in the markets, we must accept these opposite elements and use our understanding of them to our advantage.

For example, one must be more than willing to accept small losses in order to be in the market when it is trending and real profits can be made. You need to respect and follow the natural law of the markets, and not insist that the market go your way. Only enter the market when it shows an uptrend or a downtrend, and exit the market when the support or resistance is broken.

There should be no ego involved. Simply follow the trend without "owning" the position, without growing attached to the position, but rather calmly following the action of the market. Concentrate on entering the market in the right direction and following the rules with discipline.

Do not focus on how much money is on the stack or how much of it is at risk. Rather, focus only on applying the rules and following the trend. *Because you are not concerned about money or profits, you will be given the money or profits naturally.*

It's Your Job to Reverse It Lao-tzu described the Tao (or Truth) as "great, intangible, far-reaching, and reversed." This is so true especially to the human being. Our eyes physically are like lenses, and therefore, the real images inside our eyes are all reversed. Top becomes bottom, and the bottom becomes the top, right becomes left, and left becomes right. It's our brain that corrects the images and brings the reversed images back to the correct one—this is why we still "see" the top is the top, and the bottom is the bottom.

In trading, market information is coming in a reversed format most of the time; good news may trigger a sell down, while bad news may bring a market rally, and so forth. This is why it's very easy to take the wrong direction. It's the job of your brain to reverse the reversed information of the markets back to truth. Pay attention to any possible loss and forget profits during a trade. See risk as your reward. See how a support is reversed and becomes a resistance. See how an up trendline as giving the first critical point to a down trendline. A successful trader told me, "I specially thank every loss that teaches me the lessons."

Why do you think you still have the privilege to trade? Because of the great possibility of losing. If everyone in the game is going to win, there would be no trading industry. It is the "loss" that makes everything possible for trading. The art of handling the loss is the key to profits. In order to be in the market for the opportunities to win, you must know a way to enter the market and deal with the losses.

Be Flexible Like Water

In verse 78 of the Tao, Lao-tzu states:

> *There is nothing in the world more supple and pliant than water. Yet even the most hard and stiff cannot overcome it.*
>
> *This is an irrefutable truism. That the meek overcomes the strong; just as the soft surpasses the hard, is known to all of us, but no one can master the practice.*
>
> *Therefore the master remains serene in the midst of sorrow; evil cannot enter his heart. Because he has given up helping, he is people's greatest help.*
>
> *True words appear paradoxical.*

Figure 4.4 quotes one of the most famous phrases of Tao: "The best of best methods is like that of water," with a "marking color" painting and calligraphy by Victor K. Wang. A part of the painting is also on our book's cover.

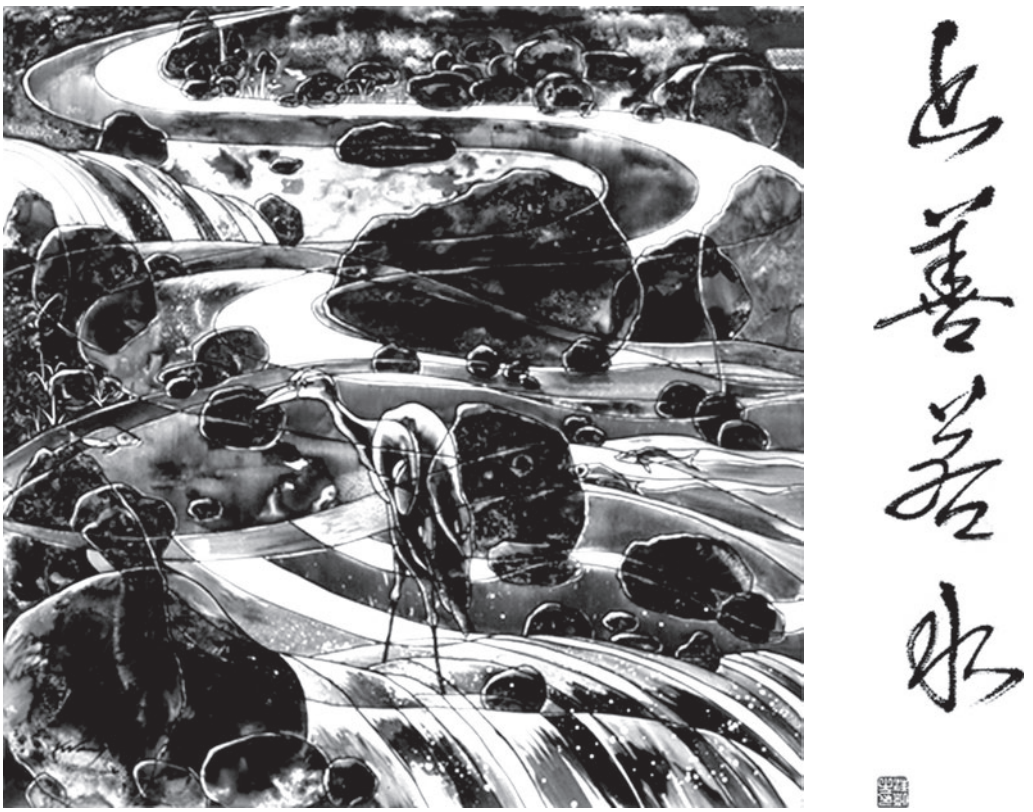


FIGURE 4.4 There is nothing in the world more supple and pliant than water. The calligraphy means the best of best methods is like that of water, by Victor K. Wang, used with permission.

People are stiff and inflexible—that has been one of the weaknesses of human nature since ancient times. This inflexibility is an influence in trading as well. Why? The main reason is that people love immediate results and often do not have the patience necessary for long-term success. They tend to have knee-jerk reactions to wins and losses, and aren't always able to step back, take in the bigger picture, and adapt their decisions according to what the market is telling them.

The purpose of AbleTrend is helping you to see the markets more objectively. The necessary next step is knowing how to follow what the market is telling you. In order to faithfully follow the market, you must be able to respond with tremendous flexibility, and not insist that everything go your way. Inflexible traders stay in losing trades too long, or refuse to enter trades when the market isn't going the way they think it should. Flexible traders can respond easily to changing market conditions.

AbleTrend is based on high probabilities, not absolute certainties. As the market develops, AbleTrend adapts to the changing picture to determine the up-to-date probabilities—allowing its users to adapt their actions accordingly.

Have a System that Can Provide Objective Support/Resistance Levels
Many traders hold on to their growing losing trades due to ignorance of objective support/resistance levels. But AbleTrend stops make it possible for traders to surrender to the market objectively.

AbleTrend stops are defined by the market's own support and resistance levels. Therefore, when the market penetrates the support or resistance levels and remains beyond those levels after price bars have closed, it is time for traders to execute their stop orders. By responding to the AbleTrend signals, traders are given the guidance to surrender to the markets scientifically.

Cultivate Your Willingness to Take Calculated Losses Willingness to take calculated losses is the lifeblood of a mature trader.

Here is a helpful analogy: Why do you think tires of automobiles can stand up to the rigors of the road and take so much hardship to ensure the smooth movement of the car? At first, tire manufacturers tried to make a tire harder so that it could resist the shocks of the road. It was soon recognized, however, that they had to make it softer so the tire would absorb the shocks of the road. That softer tire was the one that could "take it."

In the same way, we will enjoy a smoother ride along the market trend if we learn to absorb the small losses, and let the huge profits take care of themselves.

Masters of Jujitsu teach their students "to bend like the willow, not resist like the oak." A person must have a deep sense of security in the fundamental principles of the market—the kind of security allowed by AbleTrend—in order to genuinely follow the market with tremendous flexibility. People with little internal security can't do it. Just as in life, only the most confident people can be flexible and "vulnerable" enough to take useful criticism, while people who have less inner security are more likely to be defensive, protective, and stiff. "If you're going to bow, bow lower," says Eastern wisdom.

Detach Yourself from Trading Taking losing trades does not make you a loser; rather, it is inevitable if you are going to be successful at trading as a business. Remember, you don't have to "love" a stock or a market. If the market is sideways, select another one that is trending. You don't "own" a position—and the position doesn't "own" you. If the market is showing you that the position is wrong, give it up.

Cultivate trading confidence by practice with "virtual paper trading" (VPT; see Chapter 7). Because AbleTrend stops can be tested historically, it helps you to learn the characteristics of the particular market you're trading, and establish confidence with the stop levels AbleTrend provides. Without confidence in a system you are using, it's almost certain you will not be able to follow your system, no matter how great your system's paper performance is. With confidence in your system, you can follow the market with tremendous flexibility and objectivity.

Simulated trading with Virtual Paper Trading enables you to concentrate on the trading process itself, rather than being distracted by focusing on the money you are winning or losing. This is a great way to build your confidence in a system without risking any of your trading capital.

Truth Is Vague and Intangible

In verse 21 of the Tao, Lao-tzu states:

> *The greatest virtue is to follow the Truth and the Truth alone.*
>
> *Truth is vague and intangible. Though vague and intangible, within it there is substance. Though vague and intangible, within it there is form. Though distant and vacuous, within it there is essence.*
>
> *Although dark and obscure, its essence is real, its validity can be proven. It has existed from the earliest time, and only its name is new. It is the primary origin of the whole nature.*

I often think about the question "What makes trading the most difficult thing in the world?" I could not give a better answer than what was said in the Tao 2,500 years ago:

> *"That which cannot be seen is formless. That which cannot be heard is noiseless. That which cannot be touched is bodiless. These three cannot be examined in detail for they really constitute one indivisible whole."*

How does this apply to trading?

- Tao describes Truth as vague and intangible.
- Although truth is vague and intangible, yet there is a substance and essence.
- *Truth has existed from the earliest time, and only its name is new.* In trading, the trend is inside of the markets. The trend is there, but you cannot see it. The trend talks, but you cannot hear it. The trend manifests itself, but you cannot touch it.

- We need ways to observe the trend, display it, and follow it.
- Fundamental laws in philosophy can be applied to trading markets. Following the natural laws is beneficial. It gives hints of what might be.

TRADING IS A BUSINESS

What do you see trading as? Do you see it as:

- An exchange, involving the buying or selling of goods or services?
- A game that can be exciting for speculators?
- A tool, for example, one that enables traders to hedge the market?
- A war, albeit one without bloodshed?
- A business that happens to be the most difficult thing in the world?

Depending on the person giving the answer, there are elements of all of these in trading. However, our answer is that we choose to see trading as a business.

There are two basic types of participants in the futures and commodity markets: hedgers and speculators. The hedgers are those seeking to minimize and manage price risk. Speculators are those willing to take on risk in the hope of making a profit. It doesn't matter whether you are either a speculator or a hedger. We all need to treat trading as a business.

Why Do You Need a Business Plan for Trading?

In the following, we will reason why you need a business plan and how to compare it with a normal business.

Turning Crisis into Opportunity In 2008 and 2009, some individuals and mutual funds found that their accounts lost 50 percent of their value. If you had been holding stocks of blue chips—General Motors (GM), AIG, or Citibank (C)—for 20 years, those stock values dropped 90 percent. It's a very scary situation. To protect what you've earned is not an easy job in today's fast-changing, volatile market. Should you exit or hold tight? Should you buy more shares or take partial profits?

AbleTrend helps you answer these questions. The software allows you to quickly and easily auto-scan the markets in your 401(k) or IRA accounts. You can instantly confirm that support levels are still in place for your retirement investments. You can place stop orders to ensure that a market crash won't mean a major setback to your financial security. To prepare for the greatest financial crisis we've ever seen in modern times, you need to use an advanced trading tool, such as AbleTrend, for a ground-zero look at what's unfolding globally. You need a more precise view of the markets than has ever before been possible! You need a more coolheaded guide, helping you find early trends

around the world that offer the greatest investment opportunity, while helping you manage your risk. Instead of following the crowd, you'll have a chance to get in ahead of the crowd as you find early trends that most investors don't even know exist yet.

Zero-Sum Game Remember, trading is a zero-sum game. Trading doesn't create wealth, but rather it transfers wealth from one to another. It is peaceful on the surface, but it is a war without guns and bloodshed. Remember, if you win, someone must lose, and vice versa. As we know, the final purpose of any war is to achieve economic or financial goals.

Some people view trading as a big gambling game. Many years ago, if you told others that you were a futures trader, people might think you were a risky speculator, and you were not considered as being anything other than a gambler. In fact, trading actually arises from the real needs of the economic and financial activities of society. I don't need to spend much time explaining this. There are libraries of books about what trading and the markets are. The critical point is this: *Trading is a business.* Since it is a business, we must treat it as a business, and not as a gambling game. Since it has the nature of war, we should be well prepared before jumping into the "war zone" of trading.

However, as yet there are no business schools or universities that officially teach the business of trading. There are no such trading-related courses, or majors, or degrees for trading within our school system. Hundreds of billions of dollars exchange hands each year from one to another through the trading business, and yet there is little in the way of education to help people run their trading as a business, rather than a game of chance. Most traders come to the markets without a business plan for trading or even knowing what the basics of their business plan should be.

Beware of Fighting a War without a Plan Fighting a war without a plan is equivalent to suicide. The only way to succeed is to use a proven winning system and stick to it. You must have a trading plan before you make any trades—and while a trade is under way, you must stick to it. Do not change your plan during the trading session unless you have a very good reason to do so. You can change your plan in future trades based on what you learn, but changing your plan mid-trade is usually based on emotion and leads to more severe losses.

Enter the trading battlefield armed with time-tested risk management and money management strategies. This helps to remove guesswork and emotion in trading. The strategies and signals you will use to execute your trade are critical aspects of your overall trading plan.

Summary: Trading Is a Business As when starting any business, you need a business plan to run your trading business. Table 4.1 is an outline of the basic features you should incorporate into your trading business plan, as they compare to the features that are normally included in any standard business plan.

You can learn more about this topic by reading the book *Trading as a Business* by Charlie F. Wright (1998).

TABLE 4.1 How to Run Trading as a Business

Run a normal business (company)	Run trading as a business
Mission statement is your direction	What's your goal in trading?
Need a business plan	Need a business plan
What's your market?	What markets do you trade?
Products	Which system/methods used? What trading style: day, swing, position, or portfolio trading?
Research & Development	Efforts to validate, verify, back-test, paper trade
Infrastructure and equipment	Computer and other equipment
Financing	Capital and funds
Accounting and balance sheet	Gain/loss control
Organization and Human Resources	Your trading team and brokers
Reinvestment plan	Money management software
Sales	Find liquid markets
Education and training	Education and training

ONLY TREND FOLLOWING WORKS

Verse 29 of the *Tao* tells us:

> *Do you think you can control the world? I do not believe it can be done.*
>
> *The world is a manifestation of change and cannot be controlled. Trying to control leads to ruin. Trying to grasp, we lose.*
>
> *Just as you breathe in and breathe out, the world is a manifestation of change; sometimes ahead, sometimes behind, sometimes dynamic, sometimes static, sometimes vigorous, sometimes feeble, sometimes being safe, sometimes being in danger.*
>
> *Therefore, refuse to distinguish excesses and extremes. See only oneness. Flow with Infinity and exist in peace and harmony.*

All trading methods fall into one of two basic categories:

1. Trend-following methods
2. Against-trend methods

Trend-following methods try to "Flow with Infinity." Against-trend methods try to "control the world." We will now see why the former approach is the intelligent way to engage the markets, while the latter approach cannot succeed in the long run.

Trend-Following Methods

Trend-following methods result mainly in "buy high, and sell higher" or "sell low and buy back lower." A market's trend is driven by its internal forces. It reflects the market's

own symmetry. Trend-following methods work because they act on the market's actual direction, rather than acting on assumptions associated with the news or a trader's own ideas. The market has its own character and personality. We cannot stop or change it. But to be successful we must merely ride on it. Its movement is natural and smooth. It can be ridden, just as easily as gliding on a boat downstream, and *small efforts can achieve big results.* See more about why trend following works in the pages that follow.

Against-Trend Methods

Unfortunately for them, the majority of traders trade against the market trend. They follow the precept of "buy low and sell high." We were taught this strategy from a very young age. It feels natural to most people. If a store has a sale where it offers big discounts, people tend to buy more. If prices are up, people tend to buy less.

This approach does not work in the world of trading as a viable business plan. The money of traders who fight against the trend often becomes the fuel for increasing the movement of trends. Even so, there are many trading theories, methods, indicators, and systems that are designed as a result of these arbitrary ideas. Ten or so years ago a well-known article was published with the title "Trend is your enemy." Rather than following the market trend, many trading ideas and formulas, such as oscillators, cycles, turning points, Elliott wave, Stochastics (%K, and %D), and RSI, among others, are specifically designed to trade *against* the markets.

If you wish to trade the markets with consistent success, you must abandon against-trend methods and begin to follow the natural law of trading with trends.

Why Trend Following Works

Trend Refers to the General Direction If we know the general direction that the market is heading, we can achieve a profit by simply riding on the natural course of the market's flow. The market itself determines the most highly probable direction in which it is likely to continue, coupled with support and resistance levels. The trend and support and resistance levels are defined by the market's own prices.

We cannot predict the trend—but we can follow it to our benefit. This is a major difference between the trading method that underlies AbleTrend and other approaches to trading. *The primary purpose of this book is to define a trend objectively so traders can follow the trend for profits in trading.*

How much simpler—and more successful—trading becomes when we get out of the predicting business and get into the business of simply following trends as they unfold before us.

Act on Facts Trend-following methods work because they act on facts—the actual market direction—rather than acting on assumptions associated with news or a trader's own ideas. Just think of how many times we feel that the market is "too high" or "too low," or has gone "too far." Then we try to fake out the market. Just think of how many times we hear a very bad or very good news report, and yet we see the market reacting

by going in the opposite direction from what we would expect. You might think it just doesn't make any sense at all. And then you wonder what is going wrong, and what happens next? The market has reached another new high or another new low! Our minds just cannot accept the reality of the market. We try to justify in our minds why it should or shouldn't be this way or that way, when all we really need to do is see what the market is telling us and act on that.

The Majority of Traders Trade Against the Market Trend Again, bearing the standard of "buy low and sell high" before them. But when the market is nearing new highs, it is clearly saying, "I am going up now." So why is it that so many people still don't hear the market's voice, but try to sell the market? In fact, no one can stop a market's trend except the market itself. As I said earlier, the money of traders who fight against the trend becomes the fuel for further movement of the trend. (With regard to this, read about the "80-20" rule in this chapter.)

I clearly remember something that happened when the British pound crashed in 1992. When the pound crashed, one report said that the British central bank kept buying the pound in order to shore it up, but the British central bank still lost over $1 billion a day at that time, even with help from many other central banks. It just shows that even the most powerful forces cannot overcome the market trend. To trade against it will always be a losing proposition.

Another example was provided by the U.S. stock market in 2008. After the DJIA index reached a top at 14,198 points on October 11, 2007, the U.S. stock market started to drop. When the market dropped to about 10,000 level in early October 2008, many mutual funds and big traders start to buy. They predicted that the market had reached the "bottom," and this was a good time to "buy low." However, the market has its own way, which could not be predicted by anyone. The market continued to move all the way down to 6,500 point level in March 2009. Most of those buyers panicked and sold out their positions as the DJIA index neared the 6,500 level—but it was too late.

Another example came when a big Hong Kong firm "hedged" the Australian dollar in 2008. In fact, they were not hedging, but purely speculating! After July 2008, the AUD/USD reached 0.9800, and the Hong Kong company predicted the U.S. dollar would become weaker due to the economic crisis that had started in the United States. They began to heavily buy AUD/USD. However, the AUD/USD kept dropping to 0.8800, then 0.7800 (that's a loss of 2000 pips per contract, i.e., $20,000 loss per contract!). They kept buying more and more contracts. Eventually, their losing positions were too big to handle and they had to exit with a net loss greater than $2 billion near the low at 0.6000. In 2009, the CFO and CEO of the Hong Kong company were fired by their parent company in China.

Trend Is a Trader's Best Friend, an Ally—the Strongest and Truest of All As we have mentioned before, the trend flows like water, and as it goes it defines the course of the market. There is nothing in this world more supple and pliant than water, and nothing easier than to be in a boat, just floating along with the current downstream.

This is more than just a poetic thought. It is a significant lesson that traders would be wise to take to heart. To trade by "following the way of the water"—that is, to move with the trend – is to trade effortlessly, without emotional upheaval. By this same analogy, moving against the trend is like trying to direct our boat against the natural flow of the current. It takes effort and we often end up where we never intended to go.

It's All About the Market Price The wish to "buy low and sell high" has been ingrained in our thinking since we were young. There are times when it paid off as we watched our parents buy groceries at the local store. If a store is offering a big discount on your favorite brand of coffee, it makes sense to stock up. When the price is high, it makes sense to buy less. But the question is, why does this work in our daily life, but not in trading?

The biggest difference is what we know about the price. Prices for goods at the store are far different from the prices paid at the trading markets. For tangible goods, such as a cup, or a pound of carrots, or clothes, or gasoline, or an automobile, we have a very good sense of what price is fair. However, when it comes to trading, what is the fair price for a stock, or a commodity, or a bond?

The fair trading price is so hard to determine or to know that we cannot all agree with each other. This is why there are buyers and sellers at all price levels as trading progresses. And this is also why trading is the most difficult thing in the world.

Because we don't know what the fair value price for a market is, and it certainly does no good to guess, we have to let the market tell us its own thought about what the correct price is. The way the market tells us is that it goes up if the fair price is above the current price, and it goes down if the fair price is below the current price. The hidden fair price always guides the way the market moves. We cannot see or know the fair value, therefore, we have to wait and let the market go ahead of us. Then we can follow it.

Why is trading viewed as the most exciting game? It is mainly due to its unknown results and unpredictable nature. By following the trend, we let the market tell us the fair price, and that is how we make our decisions. We are no longer playing a game. We are acting scientifically on the facts. Isn't that better than playing a game with your future?

Why AbleTrend Works

AbleTrend is a trend-following trading method. Based on trend definition and concepts that are described in Chapter 2, we designed four sets of proprietary AbleTrend indicators. AbleTrend uses these four sets of independently calculated indicators to truthfully follow and visually display a trend, and then to confirm its direction.

It has been my experience that AbleTrend catches every trend in its early stage and never misses a big move. Using historical data, anyone can test AbleTrend's performance with regard to a variety of major historic moves, such as "Black Monday" of 1987, 9/11 of 2001, and the economic crisis of 2008. If you take the time to do so, you will clearly see why I can say with confidence that AbleTrend never missed any big move in the past 20 years.

It is important to understand that a trend is not a trend until it is on its way. Therefore, *AbleTrend cannot and is not designed to pick the top or bottom ahead of time, or even as it is happening.* On the contrary, AbleTrend acts on the facts as they present themselves (i.e., what the market is doing now) and simply follows the market's lead. We can only truly identify a top or bottom after prices confirm that a change in trend direction has occurred. AbleTrend never makes assumptions about what the market should be doing. AbleTrend is powerful because it creates the lens through which people can observe real market actions without altering what is seen. AbleTrend is live and updated with every coming tick in real time, so its data is always current. And because of the power of its mathematical formulas, AbleTrend can identify a change of trend with minimal data—and therefore, at its early stage.

In its identification of where to place optimal stops (i.e., at support and resistance levels), AbleTrend furnishes traders with great flexibility for entering and re-entering the market. Those stop values are directly driven from the market price's action and reaction, not from any arbitrary idea. AbleTrend provides optimal stops for every trade objectively. And as my experience has shown me again and again, if you know where to exit the market, you can enter the market at virtually any time. Above all, AbleTrend is universal and based on the natural law, which works for any market and any time chart. It's time-tested and timeless.

The Unfinished Pyramid

The AbleSys logo is based on the unfinished pyramid with a glowing eye at the top that appears on the back of our dollar bill (and is illustrated in Figure 4.5). President Roosevelt placed this symbol on the dollar bill in 1935, in the middle of the Great Depression. The pyramid was meant to represent economic strength and durability. It is

FIGURE 4.5 AbleSys logo and the unfinished pyramid.

unfinished, to symbolize the possibilities of ever-increasing American wealth. Today, within fast-changing global markets, great profits are being made every day. But *where* and *how* they are being made is changing rapidly, and the rate of these changes is increasing.

We believe that the glowing eye at the top of the pyramid symbolizes the use of wisdom and power in seeking out, acquiring, and managing wealth. With the use of today's computer technology, more than ever, how you process your information will determine if you win or lose. AbleTrend was designed to add to the wisdom and power that individuals can apply in today's markets.

DON'T TRADE AGAINST THE MARKET

Let me repeat: Don't trade against the market. We need to emphasize this many times due to its importance. There are many trading theories, methods, indicators, and systems that are designed on the basis of arbitrary ideas. Picking tops and bottoms, "buy low and sell high," "cycle trading," and so on, are typical ideas that lead people to trade against the markets.

Our philosophy is based on a different concept. We trade with the market trends. To illustrate this concept, think about a person's vision. All people have limitations in vision with their naked eye. In addition, external factors, such as heavy fog above the sea, will add to the blurring of clear vision.

When traveling across a sea through heavy fog, the vision of the captain who is directing a ship will be influenced by his previous ideas about where things are located.

As a result, he may even end up running his ship aground while moving in the direction that he believes is correct. Likewise, theories and ideas based on arbitrary points of view about the market will cloud a trader's vision. If a person's mind is gradually programmed with arbitrary concepts, his or her perception of trading will be highly affected, likely leading to negative results.

Each of us tends to think that we see things as they are, and that we are objective. But this is not true. We see the world, not as it is, but as we are, or as we are conditioned to see it. When we make our trading decisions, we are acting on our perceptions. Seeing is being in the human dimension. This is why we often see people reacting in opposite ways to the same news. What we see is highly interrelated to what we are. If our perception is dominated by concepts of trading against the market, then we cannot go very far in changing what we see unless we simultaneously change our being.

If we are to succeed in trading, we must follow the market trend. The only measurement of the value of any theory or concept is how well it functions in the real world itself. What is the real world? The real world in trading is the precise way that the market is actually going at a particular moment. A trend is not a trend unless it is on its way.

To speak plainly, the only question of importance is, what is the market doing now?

Ancient Chinese philosophy suggests that one should empty one's mind, and react to the world just like a *mirror*. When an event occurs, the mind accompanies it; when the

event ends, the mind should empty accordingly. One need not overreact to anything that is seen. True practice of this philosophy can lead one to a happy and natural life.

By adapting this ancient Chinese way to modern trading, we gain an advantage. The way we incorporate this wisdom into our trading behavior is to:

- Train our minds to react like a mirror.
- React to what is occurring now.
- Not overreact.
- Act on the facts.
- Not rely on assumptions or opinions.
- Give up or "let go" if we are going the wrong direction.

To understand why this is so important for success, it helps to study what happens to traders who fail to follow this approach. We can learn from other people's experience—and in this way we can avoid the expensive price they once paid.

For example, from 2003 to 2007, we experienced the most bullish stock market in history. The Dow Jones industrial index started at 7,500 in 2003 and had broken 14,000 points by 2007. Within this well-trending market, most trend-following systems or trading methods made huge profits. On the other hand, there is always the majority of traders who trade against the market. By breaking the stops of these sellers who traded against the market, the bullish market got sufficient fuel to support the continued up moves.

One trader I know whose "trading technique" was to go against the flow lost $60,000 in 2007 by trading the S&P market. His trading method was based on counting the number of consecutive close highs or the number of consecutive close lows. After the market had passed the ninth consecutive closing high, which followed the entry rules of his method, he entered a short trade by selling three contracts of S&P. A few days later, he found that the market was strongly against his position. The market had moved up 150 points ($37,500/contract) from his entry price. His wife was very worried about it and asked him why he was still holding this losing position. He said that according to his favorite "selling top" theory, the market should turn down any time now, because the market had passed way beyond its 13th consecutive closing high! His wife looked at the chart and replied: "I don't know too much about trading, but I see the market is going up right now!" He said, "Don't worry. You see, both Stochastics and RSI above 90 percent have confirmed the market should go down." He held on to his short position for a few more days. Eventually, he couldn't sleep well at night because the loss was far beyond the limit of his risk tolerance. It cost him extreme pain to exit from this unforgettable trade—with a loss of more than $60,000.

Lessons from this story:

- Have a good picture about what the market is actually doing; ask yourself when the trend started or ended.
- Obey the market. Don't fight with the market; don't trade against it.
- Admit your wrong direction as soon as possible.

- Always use stops by knowing the key support and resistance levels.
- Do not make your trade based on "theory." Any theory, no matter how good, can be wrong in trading from time to time.

WHICH MARKET IS THE MOST TRADABLE AND WHY?

Among all the markets, which are the best to trade? This is another one of the most asked questions by our clients. The answer is the Forex markets. The daily exchange of Forex around the world amounts to $3 trillion—about 25 times the size of all global stock markets combined. Among all "market wizards" interviewed by Jack D. Schwager (1989), many of them made their fortune by Forex and futures trading.

As it turns out, AbleTrend has done very well for the Forex markets. This phenomenon clearly tells us that the number of traders, trading speed, trading volume, and trading dollar amount play a significant role in the accuracy of the signals generated by AbleTrend. Because AbleTrend follows the natural law of the market, the more trading volume, the better its performance.

Will AbleTrend fail if more and more people use it? Will the markets be skewed? The answer is no, not at all. One reason why is that AbleTrend is universal and applicable to all time frames. Among all its users, very few use the same time and time frames. Second, because AbleTrend follows the natural law of the market, the more traders who use it, the better its performances are. We will explain this phenomenon in depth in the following pages.

Which Market Should I Trade?

This may be the first question faced by any trader when he or she starts trading. Among stocks (equity), futures, commodities, Forex, bonds, mutual funds, and so forth, which one is the most tradable market? Among stocks, which stock is the best to trade?

This is one of the most important and fundamental questions in trading. And not surprisingly, there are a lot of products and trading instruments created based on the need to find answers to this question. Available products include stock picking tools, newsletters, TV programs, software, and advisory services, all specially designed for this purpose. Available trading instruments include index futures, ETFs, Forex, mutual funds, and so forth, all provided to meet the needs of traders who desire help. There are more mutual funds than stocks in the United States alone. As traders, we need a clear view concerning which market is the most tradable before designing our business plan.

Which Market Is the Most Trendable?

As trend followers, the question changes a bit. Instead of asking which market is most tradable, we ask which market is the most trendable? And which market is less trending?

In fact, like any natural scientific phenomenon, market movements are based on their own internal laws. We may or may not know these laws. I have seen many very smart people refuse that such laws even exist. The common words from these people are "If such a law existed, and if you even had a few small clues about them, the world would be yours." Newton, Einstein, and hundreds of great scientists discovered many essential natural laws, but they didn't own the world. They greatly contributed to the development of this world. It is the same with the law of market movement. One can apply it, and show others how to apply it. But no one can own the world.

The term "market" refers to trades or a trading place. A "trade" must always have two opposite sides. If there is a buyer, then on the other side there must be a seller. Both parties must accept the market price in order to have a trade. As long as there is a trade, there always are two sides who are willing to accept the price. It is impossible for all the parties to a trade to be on one side, and one side only. This is the fundamental concept underlying trades and markets.

Why are there markets? Because there are two sides wishing to exchange something—this is the basis of trading behavior. When millions of traders get together to make exchanges, it generates internal forces within the market. As long as the market is freely traded, the overall force will develop its own tendency. You can see and feel the existence of this force. However, you cannot exactly predict it. At any moment, you can calculate the possibilities. However, just as stated in the famous "uncertainty principle" in quantum mechanics, developed by Heisenberg in 1927, we can calculate the possibilities, but we cannot always pinpoint the actuality in any moment.

Students of quantum mechanics have discovered that when an object gets smaller and smaller so that it approaches the size of an atom, the classical Newtonian laws no longer work to describe its activity. Instead, in quantum mechanics, a particle is described as a "wave." The Heisenberg uncertainty principle states that certain pairs of physical properties, like position and momentum, cannot both be known to arbitrary precision. This means the behavior of each atom is uncertain, even though the overall behavior in large scale of an object can be precisely measured.

It is the same when trying to describe price action in the marketplace. We cannot define with precision where the price will fall at any moment. But we can outline the area within which it has the highest probability of falling. What's the major difference between behaviors of "trading science" and natural science? It's the quantity or "size" and the speed.

For example, let's examine the properties of hydrogen gas. Two grams of hydrogen gas hold 6.023×10^{23} molecules. Inside of an atom, 99.999999 percent is "space" or "vacuum." To get a sense of what that looks like, if you expanded the size of an atom so that its nucleus was 100 feet, the "electron cloud" would be the size of our earth. Each electron moves across the vacuum "within the atom" at the speed of light. With a trillion trillion atoms inside the two grams of hydrogen gas, the massive quantity and speed of light of the electrons will internally determine the overall characteristic physical and chemical properties of the hydrogen gas.

Why is it that market "properties" cannot be exactly determined in the way that natural science can determine the properties of hydrogen gas? It is mainly because we don't have a trillion trillion traders in the world. And the exchange rate (trading speed) cannot reach the "speed of light." The population of the entire world is less than 7 billion. For any specific market, the number of traders is relatively much, much less than the number of atoms in two grams of hydrogen gas. If we had a trillion trillion traders exchanging at the same time, and each trader made a billion trades a second, then overall trading behavior (or "properties") would be more like that of hydrogen gas that could be exactly predicted and expected. In plain language, if this were true, there would really be no single party who could affect the market at all!

The Forex Markets

So, knowing all this, among all the markets available today, which are the best to trade? This is one of the questions most asked by our clients. *The answer is the Forex and futures markets.* You will understand why because of what you just read. It is a question of numbers. One contract of Forex is $100,000. The daily exchange of Forex around the world is $3 trillion, which amounts to 25 times the size of all global stock markets combined. Among over 150 Forex pairs, 6 of them are the most active. Therefore, it is not surprising that the performance of our mechanical trading system for the Forex is the best and most robust of any market.

The Futures Markets

One contract of S&P 500 futures at CME is about $250,000 today. One contract of crude oil futures at NYMEX is about $1,000 today. The dollar amount traded in the futures and commodity markets is five times more than in the stock markets. In addition, some futures and commodity markets have very good trends and trade in large numbers, such as soybeans, corn, wheat, cotton, crude oil, natural gas, bonds, and so forth. The supply and demand for these futures markets is global. No one person or one country can control these markets.

The worst to trade might be some penny stocks. The trading volume and money involved with these make them too thin to trade. One or two traders may easily control the market.

This further supports the point that the number of traders, trading speed, trading volume, and trading dollar amount are significant factors, all of which play a big role in allowing AbleTrend to identify the action of the natural law in a market.

No matter how many people know or use the AbleTrend software, there is always an equal number of people on the other side of the trade. This should answer the question: will AbleTrend fail when more and more people use it, or if all people use it? The answer is "No" for several reasons. First, it is impossible that all the people will use or accept it. Trading must have two sides—there must be buying and selling at the same time. Second,

if people were all on one side, there would be no market and no trading at all. Third, the more people who are trading, the more likely it is that the market will be successfully analyzed by AbleTrend.

WHY VOTING SYSTEMS DO NOT WORK

Science teaches us that the more fundamental a property is, the more simple is its format. For example, Isaac Newton's (1643 to 1727) famous second law of classical mechanics was as simple as $\mathbf{F = ma}$. The formula expressed an important relationship: that Force is proportional to mass times acceleration. One of Albert Einstein's (1879 to 1955) great insights was to realize that matter and energy are really different forms of the same thing. This principle is the foundation of the creation of our universe and nuclear fusion. Matter can be turned into energy, and energy into matter. Matter and energy are related, and their relationship can be expressed simply as $\mathbf{E = mc^2}$.

Beware of complicated formulas, settings, and rules. Many software programs are not designed by experienced traders. They are based on the creator's own arbitrary ideas about the market, and typically employ formulas that are very complicated. Some people have even designed a "voting" system that allows users to select 20 to 30 indicators out of a larger voting group of indicators. Users enter trades based on the buy/sell signals of only those indicators receiving a majority of votes (such as 65 percent). But by that time it's either too late to buy or sell due to the voting delays, or traders may talk themselves out of entering any trade because they receive too much information or too many conflicting signals.

In fact, traders need to quickly make trading decisions based on only the most critical indications and simple rules. Their reaction must be fast and decisive. And, of course, the signals must be fundamentally sound. Traders should focus on the trades instead of complicated settings or rules.

AbleTrend makes it easy for traders by offering very simple, straightforward, and focused indications. It provides signals that are color-coded and visual. Signals are also coupled with sound alerts that traders can even receive via e-mail. The rules are very clear and easy to follow—and there's no voting involved!

WHY $500 OR 5 PERCENT STOPS DO NOT WORK

Placing stops appropriately in order to protect one's position is a critical aspect of successful trading. But knowing where to place stops most effectively is a challenge to traders. One solution that many hit upon is to select an amount of money they are willing to risk, and place their stop accordingly.

But the market is alive and dynamic, and it moves in its own way. How can you arbitrarily select $500 or $5,000 as a fixed amount for stops and expect it to work within

changing market conditions? The degree to which a market reverses or retraces is not something that any trader can decide. It's the same when using 2 percent, or 5 percent stops—it's all arbitrary. This method is not objective.

The software is actually useless if it does not offer stop values for risk management. If your software does not tell you when to exit a trade, your risk in trading will be enormous. Please note that the traditional stop values with a fixed percentage or fixed dollar amount are not appropriate because market price actions will never follow those arbitrary ideas.

Useful stop values should dynamically trail the actual trend movement. Stop values should be determined by the market's volatility and the nature of current price action, not arbitrary ideas. The system that provides the stops should be proven to be winning with back-testing before you should consider using it. You need dynamic stop values that are defined according to market price action. And those stops should be offered in real time, tick by tick and bar by bar. These are the intelligent, back-testable stops that AbleTrend provides.

WHY THE WINNING RATE IS NOT IMPORTANT

When you assess the value of a trading system, you need to look at its profit factor, maximum drawdown, winning rate, and overall long-term performance. The software should offer all-important and specific details in its back-testing reports. You should be able to find the reports that are relevant and specific to your trading style and strategies.

A higher winning rate is relatively easy to reach if you set the profit target very low. But this will not help you to make a profit. This is the trick that many software vendors play. Please watch out. If the average winning trade is $1, but the average losing trade $100, what can a 99 percent winning rate do for you? Read the book *Market Wizards: Interviews with Top Traders* by Jack Schwager (1989). A great trader in the book had only a 10 percent winning rate, but the key was that when he won, he won big. The key to trading successfully does not lie in the winning rate, but in having big wins that outpace the numerous, but much smaller, losses.

Be Aware of What 80 Percent Accuracy Really Means

Some trading software companies claim 80 percent accuracy. Our question is: 80 percent accuracy of what? You should ask yourself the same question. Some software uses common "tricks" to make this claim. They either forecast an average value or use "in sample" data for their "forecasts."

This is highly misleading. First, average value means nothing in a specific trade. Prices might fall first, then go up. Or prices might rise first, and then go down to reach the same average value. It doesn't give specific buy/sell/stop/exit points. It is useless in real trading.

"In sample" data means that the data that's being forecasted is itself used in the forecasting calculations! This might sound complicated, but its meaning is simple: since they already know the "future" results, it is easy to make "forecasts" to fool others. When this type of forecasting is applied to actual unknown future data, however, it is likely that the forecast will fail badly.

Why am I especially aware of this type of trick? In 2000, one of our software engineers developed a historical forward-testing program with unbelievably good results. It made anyone using the trading system think the world would soon be his! I asked our software team to check into this, and especially double-check whether the "out-sample data" were included in the "in-sample" data in the back-testing process. Eventually, to our disappointment, but not our surprise, we found out this was indeed a case of erroneous coding! And that was why it generated such "ATM"-like trading system results!

WHY YOU CANNOT PICK A TOP OR BOTTOM

In fact, you cannot call the high and low of a market. So many people have been misled about this that they think it can be done.

We discussed the question of market tops and bottoms in Chapter 2. As we said then, we can identify a price as a top or bottom only *after* we see the turning point. There must always be a "turning" first—a time delay—to identify the top or bottom. This is the nature of tops and bottoms. Now, if someone tells you a market has hit a top or bottom before the fact, his "prediction" must just be some idea from his own mind.

There are two opposite sides for any single trade as the trading process proceeds: There is a buyer and a seller. A top or bottom represents the equilibrium point of the market forces. Trading is very much an art. If you believe you can use scientific formulas to predict the top or bottom, it is very dangerous. It takes tremendous force to take a market from an uptrend to the point of equilibrium, and then turn around to the downside! Sometimes it works; sometimes it doesn't. The method of trading by anticipating tops and bottoms is sometimes called "catching the falling knives"!

With the trend-following method, we cannot, nor do we need to pick the top or bottom. As long as we may identify the beginning or ending point of a trend as soon as possible after it has been confirmed, we can easily ride the trend, following it effortlessly. We will leave the job of picking tops and bottoms to smarter traders.

A trend is not a trend until it is on its way. Therefore, AbleTrend cannot and is not designed to pick tops or bottoms ahead of time. Beware of attempts to pick tops or bottoms. When a trend is on its way, NO ONE can stop it by "believing" it will end. Follow the trend. DO NOT try to pick tops or bottoms. It is too risky. The market can always go higher than what you think is a top, or lower than what you think is a bottom. It is easy to think and hope, but it is very risky to act on those thoughts and hopes. AbleTrend software uses a trend-following algorithm. It helps traders to follow the trend with dynamic stops to maximize gain and minimize risk.

As we already discussed in Chapter 2, Larry Williams said, "Eventually, I realized that God does not want us to see the future. It is as simple as that." I suggest that trading system developers do not waste their time, energy, and money trying to pick tops or bottoms. It's a mission impossible.

HOW TO LET PROFITS RUN

"The biggest problems in my trading were staying too long in losing positions . . . and staying too short in winning positions," says an AbleTrend trader. Most of us have been there.

Every experienced trader knows it: *Emotions* can get in the way of making the right trading decision. It often happens like this:

You're making money on the trade. But then you start to second-guess what you see in the charts—and you lose your nerve. So you exit too early. And leave thousands of dollars of profits on the table. Or a trade has gone the wrong way. You're losing money. And you know it's time to get out—and cut your losses. But something in your gut tells you that if you just hold on, the play will somehow turn itself around . . . even though the evidence isn't really there in the chart. You stay in. Unfortunately, the price follows the trend—and heads farther south—multiplying your losses.

The fact is, we need the trend to guide us. At any moment, we can simply view the chart and see if there is any breakout of a previous high or low. We know that every trend ends with a breakout, so confirmation that the breakout has occurred is a very safe guide provided by the market trend itself.

It's easier and quicker to have confirmation of the breakout by using AbleTrend2. The T2 dots are a very safe guide. As long as they indicate that the trend is still in your favor, you can stay in the trade. Never think that a market is too high to go up, or too low to go down. Simply follow the market trend indications to make your trading decisions, and you will be helped to reach the maximum profits from a trade.

To let profits run sometimes means that the trader must sit back and do nothing. Doing something is easy. Doing nothing can be hard for many traders.

The Tao said, "Truth abides by inaction, and yet nothing is left undone. If the rulers abide by truth, all animate creation will of their own accord come under their influence, and if selfish desires arise, I would tranquilize them with the nameless simplicity (truth). Once tranquilized by the nameless simplicity, they will again be free from selfish desires. Thus free from selfish desires, they will be calm and the world will of its own accord become peaceful."

HOW TO CUT LOSSES SHORT

Be More than Willing to Take Small Losses

To cut losses short, you need to give up your big ego. Don't have your own strong opinion about any trade. Remember what water looks like—*"There is nothing in this world*

more supple and pliant than water." As a trader who uses AbleTrend as a guide, you can confidently cut your losses short . . . and let your profits run with clear, accurate, color-coded trading indicators.

The number one reason why traders fail is that they don't know when to get out of a losing trade. The number two reason is that fear makes them abandon winning positions too early—and not let their profits ride.

Unfortunately, many trading systems are ambiguous about when to buy—and give *no* indication of when to sell: The software displays lots of data and charts, but leaves it to the trader to puzzle out exactly when is the right time to enter and exit trades.

Using AbleTrend

Now, there's a better way for traders to make smarter, more-informed buy, hold, and sell decisions. It is by using the AbleTrend concepts and trading software.

Buy when you see blue. Sell when you see red. What could be easier?

We believe that AbleTrend is one of the simplest ways for this purpose. With this software, every price chart is clearly color-coded for intuitive, easy trading—telling you when to buy and sell. There is no math or curve-fitting required. Best of all, you are no longer dependent on anyone else's opinion. You know how to pinpoint the starting and ending points of trends. This knowledge alone will help you a great deal when it's time to pull the plug and exit losing trades.

One of the most effective methods to cut losses short is the accurate use of stops. The question is where to place stops so that they are true and reliable, sitting at actual support or resistance levels, but at the same time are not likely to be easily hit, allowing one to stay in the market to catch the big trend moves. Many AbleTrend users know they have a friend called Trend2 that is designed just for that purpose. As many AbleTrend users frequently say, "Never fight with Trend2."

With AbleTrend, you buy when you see a blue dot and sell when you see a red dot. It's a totally mechanical system, eliminating guesswork, emotion, and subjective judgment.

If you feel you need more information so you can trade with confidence, you can simply click on the blue to see support, and click on the red to see resistance. No interpretation is necessary on the part of the user.

With these clear, specific signals, you can control the influence of emotion and impulse, both of which are detrimental to your trading. There is no need to agonize over a chart, wondering what the current price action means. All that is required is to turn on your computer, call up the chart, and observe the AbleTrend signals. Buy on blue, sell on red. It's that simple!

Become Disciplined

By following the AbleTrend chart signals, you become disciplined. And replacing emotion with discipline can make you a more successful trader.

When trading software doesn't tell you specifically when to buy—and when to sell—its value is extremely limited. Your risk of making losing trades increases geometrically.

Here's why: Trading software that merely presents charts and a variety of unclear indicators forces the trader to filter market data through his own fears, greed, and prejudices. The result is emotional trading. We should remember that keeping a clear head means the difference between profits and losses.

Do be aware, however, that even when using a winning trading system, that by itself will not make you a winner. Eventually you trade the markets, not the trading system. Unless you are a disciplined trader, even the best trading system will not save you from trading impulsively. We discussed these issues of discipline and having a winning trading psychology in Chapter 3. I suggest you refer back to those sections as needed.

To summarize, beware of trading under the influence of market impulse. Market impulse is dangerous. There are always good setups for good trades, so it is never necessary to chase the market movement. Always follow your predefined and well-tested entry rules and exit rules.

GO THE OPPOSITE WAY OF THE MAJORITY

People say that the market is designed to fool most of the people most of the time. Why?

In general, there are two paradigms in trading.

Most new traders and the majority of experienced traders tend to fall into the first category: They tend to be trapped in losing trades too long because of hope, or an arbitrary belief about where the market is "supposed" to go. But they are unable to stay in long enough to gain much profit due to fear in trading.

A small percentage of successful traders are in the second category. They are willing to take necessary small losses, and are therefore able to stay in long enough to receive the full potential profit when the market moves in their favor.

The "80-20 Rule"

Let me introduce you to the concept of the power law. Without getting too technical, a power law is a special kind of mathematical relationship between two quantities. If one of the quantities is the strength of an event, and another is the frequency of the event, it is known as a power law distribution. In such a distribution, as the strength of the event increases, the frequency for that event occurring decreases significantly, to the power of 2, or 3. For example, with regard to earthquakes, the occurrence of a tremor twice as large is four times as rare as a smaller earthquake.

Examples of power laws occur throughout the natural and manmade world and have attracted the interest and study of many scientists. One example of a power law is the inverse-square law of Newtonian gravity.

There is a specific power law, the Pareto principle (also known as the 80-20 rule), which is of great significance to traders, although it has many manifestations. For example:

- Most tax data show that 20 percent of individuals own 80 percent of the wealth.
- In some countries, 20 percent of the citizens own 80 percent of the land.
- 20 percent of nations create 80 percent of the global GDP.
- It is a common rule of thumb in business that 20 percent of your clients bring in 80 percent of your business.
- An earthquake twice as large is four times as rare.
- The Inverse-square law of Newtonian gravity, or intensity of light.
- And much more . . .

When it comes to trading, the rule continues to hold true: It's been found that 20 percent of traders make 80 percent of the money in trading.

Validating any power law is not an easy task. We may or may not know exactly why the particular relationship exists. I don't want to present the mathematical function for the power law. It would make this book too complicated. However, a typical graph of the power law as it relates to traders is presented in Figure 4.6. The Y-axis is the "strength of event," in this case, profits made in trading. At the bottom of the Y-axis are low profits, and profits increase as you move toward the top. The X-axis is the "frequency of event"—the number of traders who made such profits. On the left side of the X-axis are the top 1 percent of traders, and on the right side of the X-axis are the bottom 1 percent of traders. We clearly see that the top 20 percent of traders (on the left side) made

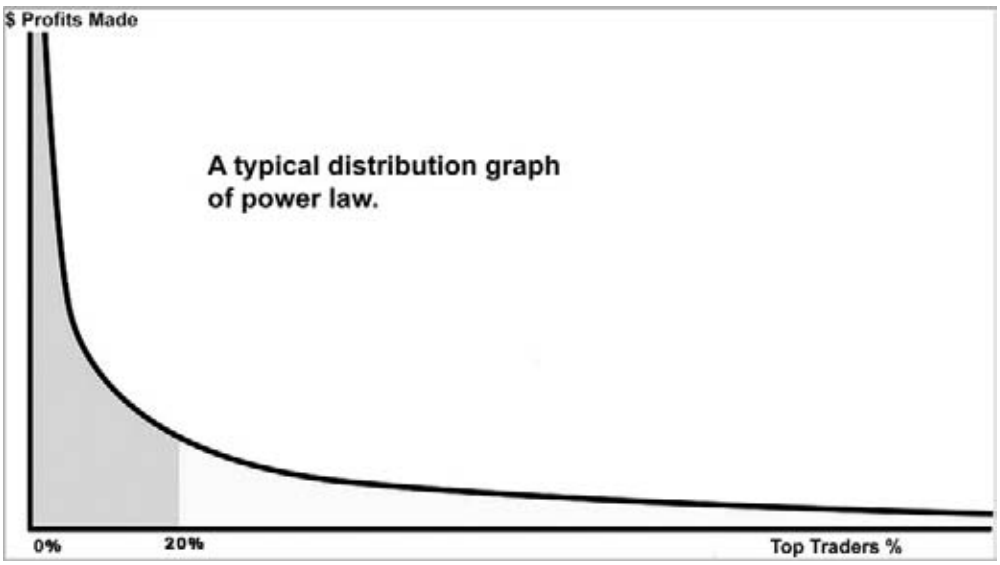


FIGURE 4.6 Power Law Relationship showing the 80–20 rule.

80 percent of the total profits or more. I read a report of a trading competition in which the results were very close to the distribution graph shown in Figure 4.6.

Why Do a Majority of Traders Lose Money?

Thousands of articles have been published with answers to the question of why a majority of traders lose money. Here are fourteen of the most popular answers:

1. The "inside market" (20 percent) is made up of the brokerage houses, institutions, market makers, etc., such as Goldman Sachs. The "retail market" (80 percent) is made up of individual investors and traders like you and me, "Joe Public." The inside traders win, and Joe Public always loses.
2. The majority of traders lack an edge; they use black-box systems, red-light and green-light software.
3. The majority of traders take profits too soon, and stay in losing trades too long.
4. The majority of traders are cycle traders: they try to pick tops and bottoms, market waves, or turning points.
5. The majority of traders like big discount prices, and are more willing to buy low and sell high.
6. The majority of traders don't understand money management, and are over-leveraged.
7. The majority of traders don't get proper training in how to trade.
8. The majority of traders don't have a trading plan to start.
9. The majority of traders don't have enough capital to start out with; some even open a $300 account to trade Forex!
10. The majority of traders don't have "Level II" data—most of them only have the "Level I" data.
11. The majority of traders lack information. They don't read the *Wall Street Journal*, IBD, or any other financial newspaper, and they don't watch CNBC or financial TV.
12. The majority of traders have too much ego and believe too strongly in their own ideas about how a market should go.
13. A psychologist once told me that 90 percent of traders don't know that trading psychology plays a 90 percent role in winning or losing.
14. Some people say that the market's function is to disappoint the majority of traders.

The reasons go on and on. I have listed only some of them. Here is what I think.

First, let me say that the "inside traders" versus "public traders" argument doesn't make any sense to me. The fact is that only 20 percent of the insiders make money, while 80 percent of the insiders lose money, too. The results of the performance of over 9,000 mutual funds clearly show that. And the current financial crisis also proves how

wrong 80 percent of institutional traders can be. They lost hundreds of billions of dollars! Among all the money lost, 80 percent has been from the big institutional insiders!

And by the same token, even though 80 percent of public traders lose money, there are still 20 percent of them who win and make money. So it is not just a question of "insider" versus "outsider."

Second, I suggest that you check through the preceding reasons. Most of them are correct. Of course, I don't agree that trading psychology plays a 90 percent role in winning or losing. But, if any of the reasons apply to you, it may be wise for you to think about what you might do to change your method of trading from now on. It is often said, "The definition of insanity is doing the same thing over and over and expecting different results." Don't repeat mistakes. Make the effort to understand why the majority of traders lose money in trading, and how you may begin to do the opposite.

AbleTrend is designed to do the opposite of what the majority is doing. With it, shifting from losing to winning becomes possible. Among tens of thousands of AbleTrend users, 20 percent are institutional traders, and 80 percent are general public traders. Without a powerful tool like AbleTrend, it is very difficult to trade. Fortunately, AbleTrend empowers traders by providing trend directions and ultimate stop placement. It guides traders step by step so that they may experience the best results.

TRADE ONLY THE RISK CAPITAL THAT YOU CAN AFFORD TO LOSE

Futures, stock, and options trading are not for everyone. Any trading involves risk. The more leverage that you use in trading, the bigger the risks. In order for people to use AbleTrend more objectively, they must be financially capable of taking the risk. We suggest to our AbleTrend users that they trade only the risk capital that represents a small portion of their financial portfolio. No matter how good you are or how powerful your trading methods are, if you are concerned very much about the risk you are taking, your objectivity diminishes inversely to the square of your fear.

You must approach trading as a business, not a gambling game. You must have a plan and sufficient capital to run this business, just as you would with any other business. A young trader once told us that he was doing very well paper trading with AbleTrend and believed he could be very successful applying his skills to real-time trading. However, his total capital for trading was $5,000, which he borrowed from a friend. In real-trading time, a $300 or $500 loss to him was significant! With the fear of losing, he could not switch positions according to AbleTrend's guidance. After a few losing trades, he just could not take the next trade which, as it turned out, was a big winner.

IF YOU WANT TO WIN, THINK ABOUT LOSS

One of the AbleTrend indicators is called AbleTrend2 (T2). Its value is in revealing the key support and resistance levels of the market. In order to faithfully follow the

market, we must be more than willing to take the small losses when prices penetrate the T2 stops.

We cannot control how much we will win. That's given by the market. Many great traders have told us we have no way to know ahead of time which trade might win or lose. However, we do have a way to control how much we lose. A trader should always be prepared for losses because AbleTrend is based on high probabilities, not absolute certainties. But T2 allows traders to respond quickly to minimize losses and be ready to take advantage of the next opportunity.

The Tao believes "There is nothing in this world more flexible than water. Yet, even the most hard and stiff cannot overcome it." A trader must have a deep sense of security and trust in the fundamental principles of AbleTrend in order to take losses when T2 tells him to. By following AbleTrend as flexibly as water, your trading will be in harmony with the market.

After trading with AbleTrend for years, and talking with thousands of other AbleTrend users, I realized that knowing the concepts of AbleTrend alone, or even owning the AbleTrend trading software, will not always turn a trader into a great trader. A trader's mind must become attuned with the philosophy of AbleTrend. Understanding the philosophy of the Tao may help a great deal in applying AbleTrend. That is why, throughout this book, we are introducing some basic concepts of Tao and its affirmations along with the trading strategies.

PLACE YOURSELF BEYOND THE POSSIBILITY OF DEFEAT

Sun Tzu, one of the greatest Chinese strategists from 2,500 years ago, said in his famous work *The Art of War* (one of the most widely read books on Wall Street, and a must read book at West Point—The United States Military Academy): *"The good fighters of old first put themselves beyond the possibility of defeat, and then waited for an opportunity of defeating the enemy. To secure ourselves against defeat lies in our own hands, but the opportunity of defeating the enemy is provided by the enemy himself."*

Trading the markets is similar to fighting. In order to succeed, we must first put ourselves beyond the possibility of defeat.

You can be right thousands of times in the market, but you cannot afford to be wrong without the protection of prepared stops. Think back to the market crash on Black Monday in 1987. From that Monday, October 19, 1987, the DJIA index dropped 850 points—30 percent of the market value—in two days. This market had just reached its record high at 2,662 points two weeks before.

Just imagine. What if you didn't know where to place your stop? What if you didn't know when to get out of the market? Where was the boundary between right and wrong if you had a long position on that Black Monday? You would have wanted to exit the market when you saw the market start to crash, but it would have been too late. You might have gotten a very bad fill, typically 300 to 500 points worse than you expected for

the DJIA, because at the time of the crash, everybody wanted to sell and there were no buyers!

To prevent this terrible situation, if you hold positions overnight, you should place hard stops at a level between the current T2 stop and previous T2 stop as soon as your initial orders are filled. In that way you limit your losses. The pre-placed stop can save you from being defeated. Any mental stop is irrelevant. A stop is not a stop until you place it in the market. A crash needs some momentum to build up. If your stops are close to your entry price, you won't get a very bad fill price.

Before you place a trade or your order is filled in any market, you must know clearly ahead of time where to place your protective stop based on the key support or resistance levels at that time. You may not know how much you might win for the trade. But you must always know how much you might lose for this trade—at what price level it is clear that you are on the wrong side of the trade—and where you must exit the market at once. You should always prepare for the worst: Imagine that the market crash could occur at any time after you enter the market in a buy position; imagine that an unexpected soaring of the market could occur at any time after you enter the market in a sell position. *If you take care of your losses, the market will take of you. Because you are not chasing profits, you are given profits.*

There are times when the market will hit your stop and then resume its movement in your direction, after you've been stopped out. It can be frustrating, but these are necessary expenses if you are going to protect yourself from serious losses. Protective stops are your insurance in trading. They may lead to small losses, but these losses will be bearable; and they will give you the confidence to hang on for the big wins.

TRADING IS THE MOST DIFFICULT THING IN THE WORLD

Trading is a zero-sum game. No wealth can be created from trading, but only transferred from one party to another. If you win, someone must lose, and vice versa. Ninety-five percent of traders lose money, according to some sources. For this topic, you may refer to, *Winning the Trading Game: Why 95% of Traders Lose and What You Must Do to Win* (DraKoln 2008). People use all means and ways to win in this game, many times to no avail.

On the other hand, trading is simple! You need to simply follow the market trend itself. You just have to understand the language in which the market talks. If it says "up," then you buy; if it says "down," then you sell. If you are in a long position and current prices have penetrated below key support, or you are in a short position and current prices are sitting above key resistance, then you know you are on the wrong side of the trade. Most people lose money because they stay too long in the market on the wrong side of the trades. Entry points are hard to pinpoint, but exit points are even harder. It's critical to understand what the market is saying, and to take action immediately when it tells you that you are wrong.

It took me many years to understand the market's own language. However, I finally succeeded and used my understanding to develop an approach to trading the markets that has now been used by tens of thousands of traders. Now I want to introduce you to the market's own language in this book.

Once you know the language, then all "fundamental analysis" will mean nothing to you when making your buy or sell decisions. You will have a better way. We want to hand you a spyglass through which to peer at the trading world. Once you look through the lens of AbleTrend, you will never see the markets in the same way again.

CONCLUSION

The Tao said, *"The imperfect becomes perfect."* How true are these words! The old becomes new. The crooked becomes straight. The empty becomes full. Loss means gain. Plenitude means confusion. Wherefore, the Sage holds fast to Truth and thereby sets an example for the world. Because he is not self-complacent, he becomes enlightened. Because he is not self-important, he becomes illustrious. Because he is not self-conceited, he becomes successful. Because he is not self-assertive, he becomes supreme. Because he himself does not strive for superiority, there is none in the world who can contend with his superiority. In order to revert to the whole, one must abide by what is normal and natural. In Figure 4.7, we show calligraphy of a famous phrase of the Tao: "The

FIGURE 4.7 A famous phrase from the Tao: "The crooked becomes straight." Calligraphy by Victor K. Wang; used with permission.

crooked becomes straight." If you observe the growth of trees, you may often see the natural ways that trees are purposely crooked in order to reach the sunlight, attaining harmony with each other. In fact, I read the Lao-tzu's original phrase again; it should be "With tolerance you may succeed" or "Stoop to compromise." This is a truth in trading that we experience every day. If we find ourselves in a wrong position, we must give it up as soon as possible. This is a part of our overall strategy to succeed in trading. Again, taking losing trades does not make you a loser; rather, it is inevitable if you are going to be successful at trading as a business.

The Tao said, "Take on the most difficult tasks by doing easy steps. Take on the greatest achievement by taking small steps. Because the Sage does not go about great undertaking, he is able to accomplish great things."

Do not try to be a hero in trading. Be a follower—of the trend.

Do not try to make a fortune, or prove yourself the master of the market. Be observant, take the indicated steps, keep your losses small, and let the trend itself lead you to great things.

My goal in creating AbleTrend was to develop a tool that could help me trade successfully following these natural principles. The positive results of my work, as experienced by thousands of traders, speak for themselves.

CHAPTER 5

The Applications

When the mind rests in the state of nothingness, the enigma can be understood; when the mind rests in the state of Reality, the bounds can be reached.

—*Tao* by Lao-tzu

In the previous chapters we have looked at the theory and philosophy underlying the development of AbleTrend. In this chapter we will look at the application of AbleTrend in actual trading, based on the concepts concerning trends that were presented in Chapter 2.

Here we will lay out everything, from theory to application, and see specifically how to use AbleTrend to trade the markets: how to enter and exit the trades, how to take buy, sell, and stop signals, where to place stops, how to evaluate trading systems, how to set up trading system parameters, how to identify and avoid a choppy market, and how to distinguish retracement and reversal.

When traders use AbleTrend, they have the option of selecting certain indicators, and at times settings for the indicators they choose to apply, based on the specific characteristics of the markets they're trading. In understanding how these settings work, we not only get a sense of the power of AbleTrend, but we also come to understand more deeply the factors that underlie market movement. Therefore, even readers who do not have access to the AbleSys tools will derive much benefit from the information in this chapter.

WHAT IS THE "WINNING FRAMEWORK" FOR A TRADING SYSTEM?

"Winning framework" here means a mechanical trading system that can be proved to be winning by back-testing validation. You may or may not trade a system 100 percent mechanically. You may or may not wait for entry at bar close. But you do need to run

back-testing to verify whether the trading system (or strategy) you're using can win or not with the historical data set. If it does, we call it a winning framework. When you use discretionary trading methods, you must first have a winning framework to guide you.

To ensure more realistic back-testing performance results, traders must build in a sufficient cost per trade (commission plus slippage) according to the execution method used. If you ignore the cost per trade in the back-testing reports, you are fooling yourself.

We begin by examining three aspects of AbleTrend that place trades into a winning framework. These include real-time signal accuracy, choice of order-execution method, and setting trailing stops to exit the market.

What's Real-Time Signal Accuracy?

A price bar, which is the basic unit of technical analysis, is defined by the length of time it represents, and four prices: Open (O), High (H), Low (L), and Close (C). In real time, before the bar closes, the last price of the last bar is live and keeps changing, moving up and down with every coming tick of streaming data. AbleTrend indicators are calculated based on the open, high, low, and close prices of the bars of the chart. Therefore, you may notice that indicators and trading-system signals for the last bar keep changing. Since the last bar's high, low, and close prices are "live," you may sometimes see the last bar's color or dot signals appear and then disappear; or the color of the signal may change from blue to green (indicating neutral), or from green to red (indicating bear), or red to blue (indicating bull), before the bar closes.

Signals are live in real time. *This is normal and what should be true of any indicator or trading system with live data.* However, as time passes by, after the bar closes, all open, high, low, and close (OHLC) prices of the bar are fixed, and all the signals for the closed bars should not change anymore. Not just AbleTrend, but every signal of any indicator or trading system faces the same challenge of real-time signal accuracy if using live streaming data.

When using the AbleTrend system in real-time trading, you will notice some signals that appear and then disappear before the bar closes. Real-time signal accuracy (RTSA) is determined by calculating the ratio of bars that offer trade signals at the bar close, to the total number of bars that had signals triggered in real time. Essentially, RTSA measures how accurate the trading signals are in real time. Conversely, RTSA measures how many signals given in real time are unstable or false. For example, suppose that 20 signals popped up in real time, but some of them disappeared before the bar closed, leaving only 14 remaining signals after the bar closed. The RTSA was 70 percent (i.e., 14/20) for this example.

RTSA should not be confused with "system winning rate." System winning rate is the ratio of winning trades to total trades. If there were 20 trades total and 14 of them were winning, the winning rate is 70 percent.

RTSA also should not to be confused with "signal change" due to "refresh" of a chart. A real-time bar chart is constructed by using two data sources: (1) historical data called

HIST or TIC data and (2) real-time data called DM (Data Manager) data. HIST and TIC data are stored in central historical data servers. To save storage space, using filters, some nearby same-priced tick data are removed. Bad ticks with big strike prices that are out of the normal price range due to input errors are also removed. Therefore HIST or TIC data are more compact and more clean than the raw live DM data. The DM data are directly fed from trading floors of exchanges. Real-time charts are built from the raw DM data. When you refresh a chart, normally trading software will rebuild the chart by downloading HIST or TIC data again. Because that HIST or TIC data may or may not be exactly the same as raw DM data, sometimes you might see differences in the signals. This is also a part of real life we have to live with. Therefore, it is necessary to refresh the chart before acting on any trading signal since the HIST or TIC data are more clean. RTSA has nothing to do with these refresh issues.

As indicated earlier, because AbleTrend, like any indicator, uses real-time tick data, market conditions may dictate that a trading signal appears and then disappears before the bar closes. An unstable trading signal is one that is gone after the bar closes. If some traders don't wait until the bar closes to take a trading signal, it is possible they will make trades according to an unstable signal. By waiting until the bar closes to take trading signals, it is possible to avoid unstable real-time signals, and the RTSA will be 100 percent.

Calculating RTSA is useful when selecting which execution method is appropriate for your trading style. A detailed look at execution methods follows.

Execution Methods

There are three different execution methods one can use with a mechanical trading system:

1. Entry at Bar Close (EBC).
2. Dynamic.
3. Hybrid method.

Only the first method, EBC, is 100 percent mechanical. The other two methods integrate elements of human discretion with the mechanical system.

EBC Execution Entry at bar close execution is the simplest approach to using a mechanical trading system. After you have chosen your input parameters, the system will generate buy, sell, stop, or exit signals based on your predetermined rules. By waiting until the bar closes to enter a trade, you will achieve 100 percent RTSA, and therefore, avoid trading unstable signals accordingly. You will take each trading signal precisely at the close of bars or the open of the next bar. Sometimes you may know the signals should be good before or far before the bar closes, for example, if a buy signal was triggered at

bar open time, and it is now far above the open price. But based on the EBC rule, you have to wait until the bar closes to execute the buy order, which means that at times you might give up considerable profits. The EBC is simpler and less risky than any other execution method because you have back-tested and validated the system before. However, the downside of using the EBC execution method is that there is often a delay leading to large slippage and lower profits than executions made in real time when the signals have just appeared. Although the EBC execution method can be applied to charts using any time intervals, it has been found to be more effective when using 30-minute charts or longer for fully mechanical trading. Shorter time-interval charts (such as 2-minute or 5-minute charts) are not suggested for 100 percent mechanical trading. This is mainly because the input parameters frequently request changes. The settings work for today but may or may not work for tomorrow.

Trading with the EBC execution method removes all uncertainties about executing market orders using real-time trade signals. As already indicated, RTSA will be 100 percent when using the EBC execution method. When the bar closes and the close price is below the protection stop level, you know to exit long positions; when the close price is above the protection stop level, then you know to exit short positions. With this approach, traders avoid a lot of false hits caused by bad ticks or random strike prices. Successful AbleTrend users find this is one of the keys that help them succeed in real-time trading. Some traders prefer to enter trades when the next bar opens (EBO—Entry at Bar Open). Our back-testing shows that EBO has almost the same results as EBC in the long run. Good trading software programs should provide back-testing reports comparing results with or without the EBC order entries.

Dynamic Execution Dynamic execution allows you to enter trades based on the real-time trading signals (TS), i.e., it allows you to enter orders before the bar closes or near the bar close according to certain guidelines. If the trade signal is unstable (appearing and then disappearing several times), wait for the bar close to enter a trade. Take the trade if the TS is *stable* and *80 or 90* **percent** of the bar time has passed. Take the trade aggressively if it is a "sure" TS in the early stage of the bar formation or under the conditions of a fast market with momentum. Using this approach, the judgment of traders is required. The dynamic execution method will result in less delay or slippage, but it is riskier than the EBC execution method. You need to place a very tight protective stop of just a few points when you enter such trades. These tight stops will protect a position that has been filled before the bar closes. Cancel the stop order when the bar closes. If you use the AbleTrend stop as one of the exit rules, you need to place a Position Trailing Stop (PTS) according to the stop value of the previous bar. If you don't use the AbleTrend stop exit rule, you don't need to set any stop. You exit your position only when you get an exit signal or a reversal signal (e.g., a sell signal when you are in a long position). The dynamic execution method requires more attention and experience on the part of the trader than does the EBC execution method. A trader must have strong discipline to apply the dynamic execution method successfully.

TABLE 5.1 Comparisons of EBC and Hybrid Method

	EBC: 100% mechanical	**Hybrid: executed in real time**
Learning Curve	Short	Short
Real-Time Signal Accuracy	100%	< 100%
Complexity	No	No
Judgment involved	No	Yes
Potential slippage	Large	Small
Profits	Same as back-testing	Better than back-testing

In order to trade according to a reliable signal and retain as much profit as possible, RTSA should be set at 65 percent or higher if you decide to use this execution method.

Hybrid Execution "Hybrid" means a combination of a mechanical trading system and your own trading experiences with other indicators. The Hybrid Execution method requires the skills of an experienced trader. The trading signals generated by AbleTrend are used as a confirmation tool if you choose the Hybrid Execution method. Attention, time, trading skill, and experience are all important while using this method. AbleTrend and the other indicators confirm your trading decisions and entry and exit points. You have developed the freedom to treat trading as an art. Compared to the 100 percent mechanical EBC method, the hybrid trading method has some advantages that we summarize in Table 5.1.

Based on the preceding three execution methods, we have developed the simplified trading method (STM). STM is a very powerful and time-tested trading method that is described in the next section.

Trailing Stop Exit

There is a lot of misleading information and misunderstanding with regard to the "Percent Trailing Stop" (i.e., keeping a protective stop a certain percentage of points away from the current price). For all trading systems using bar charts, back-testing reports normally show more profits than real trading results if the percent trailing stop exit rule is used. As we saw earlier, a price bar used in technical analysis is defined by time and OHLC prices. The information in each bar is over simplified, and we don't know how the real-time ticks moved up and down during that bar formation.

There are two factors that determine how the percent trailing stops are applied. (1) Profit Target Level in Percentage (PTLP). For example, if the PTLP is set at 5 percent, it means that when the current position gain is above 5 percent, then breakeven or trailing stop exit rules will become active. If the PTLP is set below 5 percent, the exit rules will be ignored. (2) Trailing Percentage (TP). For example, if you set it at 80 percent, it means after the current position has reached its profit target price, the trailing algorithm is activated and it will risk 20 percent of the current position gain to capture even more profit in a quick moving market.

Trailing Stop Exit is usually a real-time feature depending on the options selected. It has the potential benefit of capturing more profit in a quick moving market by risking a small percentage of the position gain. The algorithm will be triggered once the PTLP has been reached. The real-time position gain is the difference between the latest Profit Peak and Enter Price. If you use this exit rule, an exit signal will be issued when the price retraces a certain percentage from the Profit Peak.

For example, if you buy a stock at $100 and PTLP is set at 4 percent, in this case the profit target price will be $104. When the market reaches a new Profit Peak at 110, the difference between the latest Profit Peak and Entry Price is $110 – $100 = $10. If the TP is set to 80 percent, the exit signal will be issued when the market pulls back 20 percent to $108 (110 – 10 × 0.2). This price ($108) is called Trailing Exit Price (TEP). If the TP is set as 100 percent, the signal will be issued right on profit target price, $104.

When we run a back-test, the default TP is 100 percent. The 100 percent trailing corresponds to a "profit target" exit. Only the profit target exit is truly 100 percent mechanical. And only 100 percent TP setting gives a reliable back-testing report. Any trailing less than 100 percent is not mechanical. Why? This is because the trailing algorithm is a real-time feature and the bar data do not have real-time price fluctuation information in historic data. Our bar charts only have information of each bar's OHLC prices. When you run back-testing for a 70 percent or 80 percent trailing stop, there is no way to know how the last price actually moved up and down in real time. For example, in the preceding case where one buys a stock at $100, a back-testing report would indicate that the price went up to $110, and exits when it returns to $108. There is, however, the possibility that during the formation of the bar, the 80 percent trailing stop already got you out. For example, the price could have gone up to $105, and briefly back to $104, triggering the exit, before continuing upward.

You should exit your position in real time when you see the exit signal. Or you can place a limit order in advance with the PTLP value in order to avoid slippage.

We suggest using a 100 percent TP to run back-testing, which will give us the most conservative back-testing reports. The back-testing reports for non-100 percent trailing (such as 70 percent or 85 percent, etc.) are for reference only. Back-testing results with non-100 percent trailing are more likely to exceed the real results. This is true not just for AbleTrend, but for all trading systems. Be aware of this when you back-test or read other's back-testing reports with percent trailing exit rules.

If you have to use a *Percent Trailing Stop* exit rule, and also use a 100 percent mechanical method, you may also choose the Exit at Bar Close (EBC) exit. Both 100 percent trailing and EBC exits are built into AbleTrend, and therefore you may back-test such rules.

STM METHOD—BUY ON BLUE AND SELL ON RED

If you are a trader, you already understand that you need to maximize profits and minimize risks. STM is designed to do just that.

What's STM?

Among hybrid trading methods, AbleTrend's "Buy on Blue and Sell on Red" is what we call a simplified trading method (STM). Here, blue indicates an uptrend, and red a downtrend. STM combines a mechanical trading system with your own trading experiences with other indicators to arrive at trading decisions. It is also a combination of scientific (mechanical) and artistic (discretionary) methods. The mechanical trading system is the foundation that provides a winning framework for this method. Back-tests should be performed to validate the mechanical method before you use the STM.

Why STM?

Trading ultimately is a kind of art. In many cases, our own eyes are the best instruments for seeing market actions—trends, choppiness, tops, and bottoms. When we have a mechanical trading system, we gradually forget we have the best tool possible—our eyes. The STM allows you to use your eyes to see again.

Discretionary methods are an art when you enter positions in real time. As we explained earlier, 100 percent mechanical methods allow only entry at bar close (EBC). However, our back-testing reports show that if you wait to enter until EBC, a mechanical system normally gives up too many profits. Waiting in real time for the EBC is a killer. This is the main reason why one should not sit and wait for bar close. This is why STM offers such an advantage. By using STM, sometimes even a losing system might become a winner.

Markets follow the "80-20" rule mentioned in Chapter 4. A large portion (80 percent) of the time, markets show regular price movements based on supply and demand. These can be quantified by scientific methods. However, a small portion (20 percent) of the time, price moves are irregular as they fall under random market forces. The "20 percent" random forces make 80 percent of your trades not work "scientifically" because these forces are not "concentrated" within a certain time, but are rather randomly distributed in most trades. This is why trading is so difficult. Therefore, in the real world, we should treat trading artistically and use discretionary methods most of the time. Mechanical signals play a major role in STM trading, but the intervention of the trader's intelligence helps to improve the results of a mechanical trading system if you know how to do it properly. This is why we introduced the STM.

With most trading software, interpreting the charts—and deciding what to do about your findings—is up to you, the trader. But with AbleTrend's STM, this job is made simple. You only watch three key bits of information using STM: (1) **Trend**—the market direction, (2) Where is the protection stop placed? If I'm in the market on the wrong side, where do I exit? (3) What's a better or an optimal entry point?

A chart contains the basic price history for a market. AbleTrend or other indicators are applied to the chart in order to observe and read the mind of the market. You then decide how to trade this market.

Take a look at Figure 5.1 for an example. How should you trade this IBM stock? When do you buy, sell, or exit?

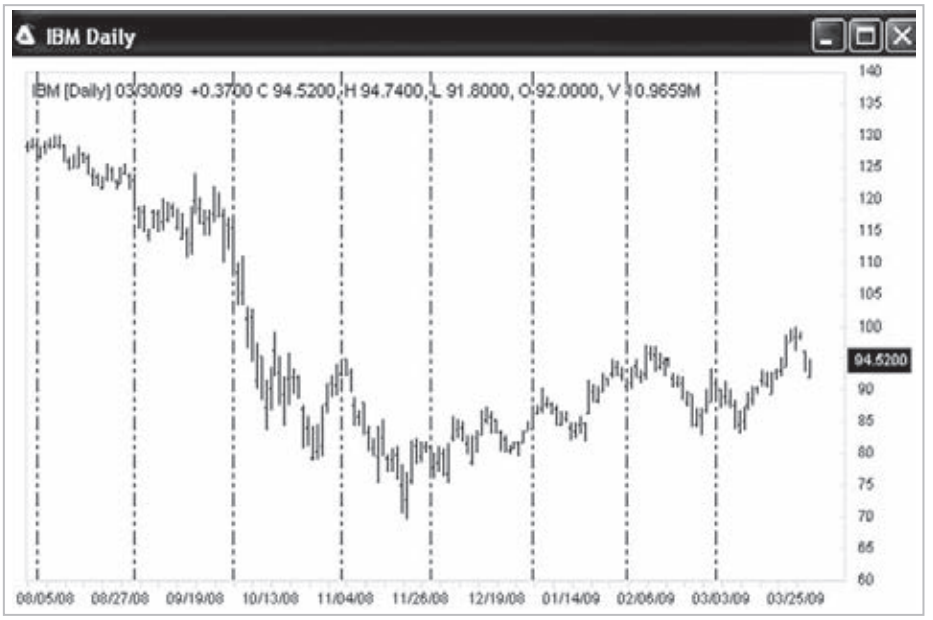


FIGURE 5.1 IBM daily chart without any indicator added. How do you trade it? When do you buy/sell/exit?

Unfortunately, interpreting chart formations is as much art as science. Ultimately, success in trading depends, to a large degree, on the trader's subjective interpretation of whether a trend or signal is forming on the charts. And whenever decision making is subjective, you risk having your emotions get in the way of making the correct move.

That's the defect in everyone's trading that AbleTrend can help solve. . . .

AbleTrend charts are color-coded to show trends, resistance and support levels, and specific buy, sell, stop, and exit signals that tell traders exactly what to do so they can trade with greater confidence.

The software uses bright, color-coded buy and sell signals where blue indicates an uptrend and red indicates a downtrend. Adding the AbleTrend indicators to a chart:

- Helps you to see the market AS IT IS.
- Visually displays the market trend and key support and resistance.
- Removes guesswork from trading so it's possible to make more objective and accurate trading decisions.
- Precisely times entry and exit points.
- Promotes trading with greater confidence and less uncertainty and anxiety.
- Allows traders to cut their losing trades early to minimize losses on trades that don't go their way.
- Helps traders ride their winners longer for greater trading profits.
- Gives traders the steadiness to exit when it's the right time to take profits and not let greed make them irrational.

Setup of STM

The Simplified Trading Method (STM) is one of the most frequently used ways to trade markets with AbleTrend software. STM is usually used with three indicators added to a chart with default settings: AbleTrend1 (Trend 1, T1), AbleTrend2 (Trend 2, T2), and Exponential Moving Average (EMA). The feature is simple.

Using all default settings of the indicators is a key of STM. Markets keep changing. How do you know what settings (inputs) of the indicators should be used? If we choose "scan" to get the optimal input settings, it may work for the historical data, but it may or may not work for the unknown future. Now, using default settings that have been proved to work for the past, we know they have a greater chance of working in the future. Markets change all the time, but the indicators used do not change.

In the following we add T1, T2, and EMA indicators to the IBM chart, one by one, and plot the charts in Figures 5.2 to 5.4 respectively. This will let you see clearly which signals are from which indicator.

Again, for all the indicators used in STM, use their default input parameters. Users don't need to scan each market to determine optimal parameters even though AbleTrend has such a function built in. If too many inputs keep changing, then how can you use it in the real world? The real future is unknown. Only after it has happened can you know if you should have used another set of settings. Therefore, STM uses unchanging, universal parameters within the constantly changing markets.

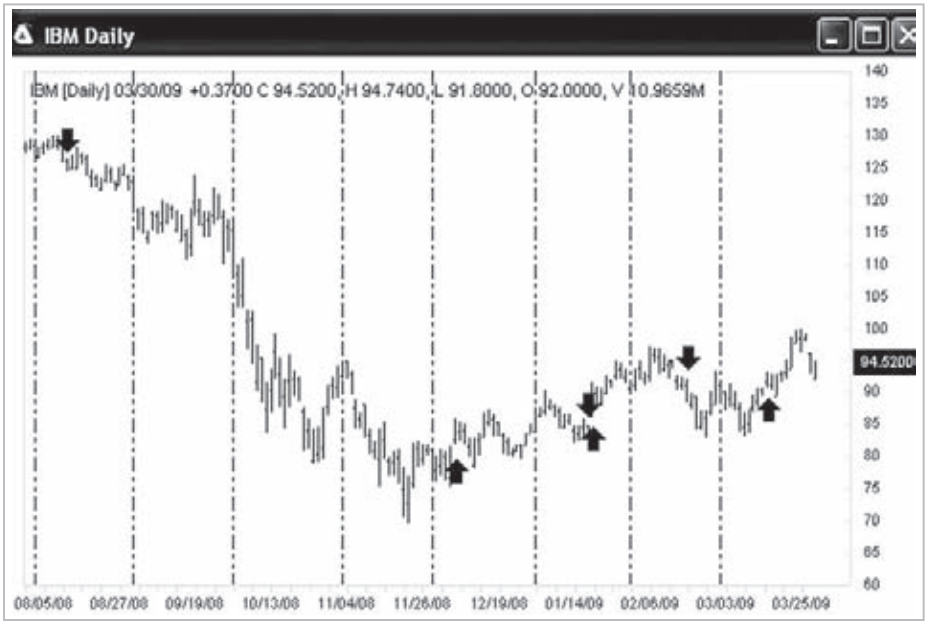


FIGURE 5.2 IBM daily chart with the T1 indicator added. Up-arrows indicate the beginning of uptrends, and down-arrows indicate the beginning of downtrends.

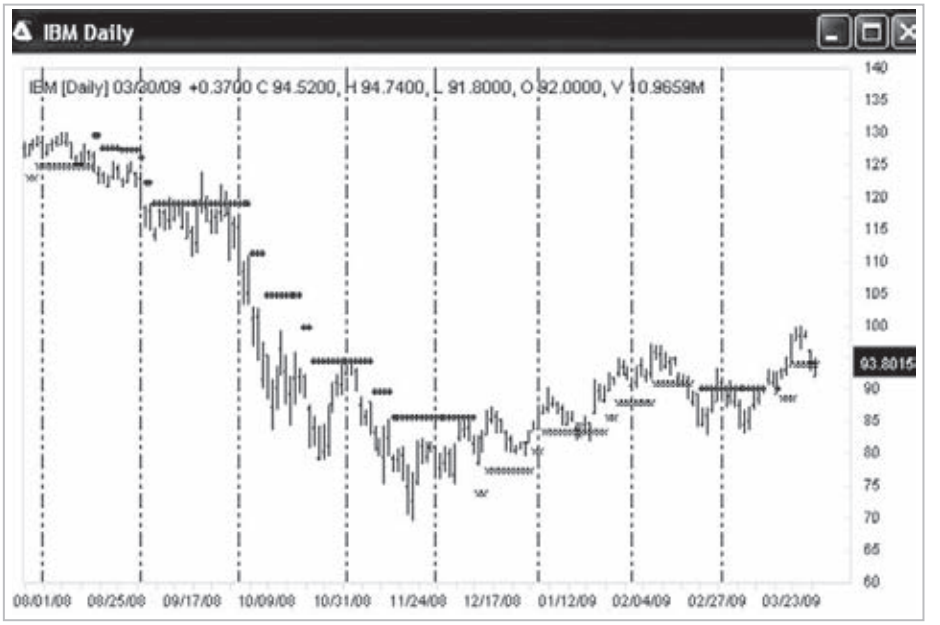


FIGURE 5.3 IBM daily chart with the T2 indicator added. Small crosses (x) below bars indicate an uptrend, and small dots above bars indicate a downtrend. Values of the crosses and dots are key support/resistance levels used as protection stops to exit the trade if the position proves to be wrong.

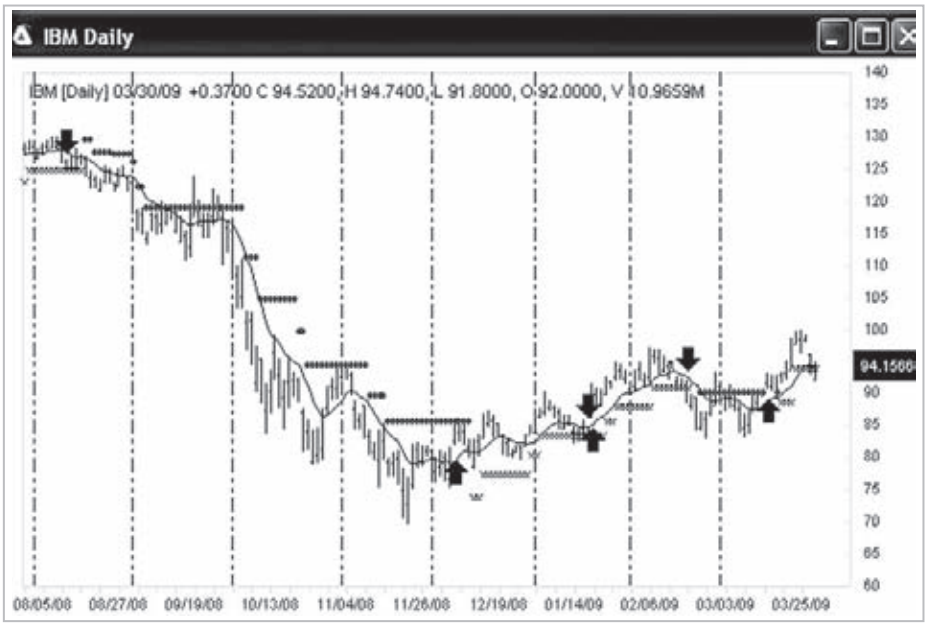


FIGURE 5.4 IBM daily chart with a line of Exponential Moving Average and T1 and T2 indicators added. All indicators are set up with default parameters.

Entry Rules of STM

There is only one entry rule: *There must be agreement between the T1 and T2 indicators:* If both are uptrends, then buy; if both are downtrends, then sell. This rule is mechanical. The trends of T1 and T2 are calculated independently.

Optional entry rule: For additional guidance, we look for an entry point close to the Exponential Moving Average (EMA) line. We try to avoid making an initial entry when the market price is far away from the EMA line. We also try to avoid trading when the market is moving sideways. (See the section of this chapter on choppy markets.)

Exit Rules of STM

Using STM, the exit rule is also simple: Follow the T2.

AbleTrend's Trend2 indicator is a trend-stop indicator, and it is highly regarded by many traders. Many users say, "Don't fight Trend2." *Using Trend2 as an exit strategy* is almost entirely mechanical: (1) If the bar closes below T2, you need to exit a long position; if the bar closes above T2, you need to exit a short position. (2) Exit your position if two or three consecutive green bars close on the wrong side of the EMA line.

Also take a part of your profits if the market has had a big run and is now too far away from the EMA line, or it touches the STARC bands a few times. For example, if you are long two contracts, take profits by exiting one contract. STM Buy/Sell/Exit signals are shown in the example in Figure 5.5.

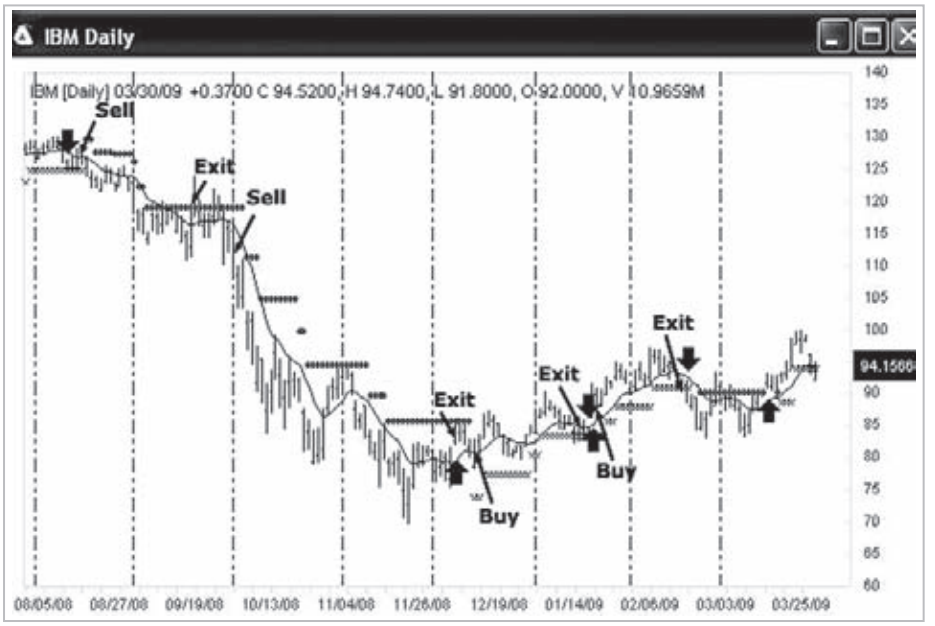


FIGURE 5.5 Examples of STM trading signals for the IBM daily chart. Based on the entry and exit rules mentioned earlier, we have marked the Buy/Sell/Exit signals on this chart.

TABLE 5.2 Comparisons of EBC and STM Executions

	Position Trading	**Swing Trading**	**Day Trading**
Charts used	Daily charts	30-minute or above	3- to 5-minute for E-minis 5- to 10-minute for stocks 15- to 60-minute for Forex
Trend guidance charts	Daily or weekly	Daily	Daily or 120-minute
Execution method	**STM** or EBC	**STM** or EBC	**STM**
Risk tolerance	High	Moderate	Low
Signal accuracy	Higher	High	Low
Profit factors[a]	High	High	Low

[a]For profit factor, see next section—Evaluate a Trading System.

As this book purchaser, you may go to a special web site, www.wiley.com/abletrend, for a *FREE 80-minute video course* about the simplified trading method (STM).

Comparisons of the features of the STM execution method with 100 percent EBC mechanical method are summarized in Table 5.2. We give guidelines there for position trading, swing trading, and day trading in the table: time intervals suggested, guidance charts used, which execution method should be used, and compare their risk, signal accuracy, and possible profit factors, too.

EVALUATE A TRADING SYSTEM: BACK-TESTING

Why must a trading system have back-testing capability?

Only trade a system that has been validated. Back-testing is the first step to validate a trading system. Beware of indicator software programs (using colored lights/bars) that do not offer back-testing capability. Back-testing is the easiest way to validate the trading signals that we know. How can anyone trust colored bars or "lights" or any other indications if they have no back-testing capability? If you blindly follow unproven signals, you are just shooting in the dark, and it will be very costly. AbleTrend offers full back-testing capability. You can validate the signals and strategies before you risk any hard-earned money. Trading with proven strategies is the best way humanly possible to trade the markets.

Methods for evaluating a trading system include: (1) back-testing reports, (2) net profits, (3) winning rate, (4) win/loss ratio, (5) profit factors, (6) AbleSys index, (7) EXP index, (8) MDD, (9) reward/risk ratio, and (10) annualized percent return (APR). We now explain each of these items in greater detail.

Back-Testing Report

AbleTrend provides back-testing reports on the trading system performance. A typical back-testing report provides the following information (Typical Back-Testing Report of AbleTrend for Symbol xx-minute chart from mm/dd/yy to mm/dd/yy):

Total Net Profit	Buy/Hold Net Profit
Total % Net Gain	Buy/Hold % Gain
Max Drawdown	Buy/Hold Max Drawdown
% Max Drawdown	% Buy/Hold Max Drawdown
Gross Profit	Total Trades
Gross Loss	Winning Trades
Win/Loss Ratio	Winning Rate
Profit Factor	AbleSys Index
Avg Winning Trade	Consecutive Winning Trades
Avg Losing Trade	Consecutive Losing Trades
Avg Trade	Avg Holding Bars
Largest Winning Trade	Avg Winning Bars
Largest Losing Trade	Avg Losing Bars

When running a back-testing report, traders should include *Cost per trade* (the commission fees plus slippage cost per round-trip trade in dollar amount). If it costs $2.50 to trade one E-mini contract, then the round-trip commission is $5. If it costs $7.50 to trade 500 shares of a stock, then the round-trip commission is $15. Add to the commission the expected slippage for the round trip to come up with the cost per trade. If you expect the E-mini S&P to slip 0.3 point, that is 0.6 point or $30 per round trip. Add that to the commission and you have about $50 for the cost per trade. If you expect a stock to slip one-and-a-half cents, that is three cents per round trip, or $15 for 500 shares. Add that to the commission and you have $30 for the cost per trade for stocks. You must increase the cost per trade if you have higher commissions or higher slippage. Also, you may increase the cost per trade if you would like more conservative results in the back-testing.

Typically, the cost per trade for 500 shares of stocks is $30; for one contract of E-mini futures it is $50; for one full-size Forex contract it is $50 to $100, and so on. Beware of some back-testing reports that do not include the cost per trade. For example, if there were 200 trades in the report, without the cost per trade taken into account, it means the report is padded with an extra $20,000 in false net profits.

Net Profits

$$\text{Net Profits} = \text{Gross Profit} - \text{Gross Loss}$$

Here Cost Per Trade is deducted from the gross profit and added to gross loss.

Net Profits are our final goal in trading. However, it is not the reason why we select a trading system. For most traders who have failed in trading it was due to the MDD size or drawdown duration. Before they started making money, these traders quit the trading system. Therefore, you must select a trading system that meets your financial situation and your risk level. Three key factors of a trading system will help us to reach this goal:

1. Winning rate.
2. Win/loss ratio.
3. Profit factor.

Winning Rate

Almost every new trader would ask, what's your winning rate? *Winning rate is not important* for whether a trading system wins or loses overall. A system with only a 10 percent winning rate can win big if you can keep the average losing trade small, and have a much bigger average winning trade. It's also true that a system with a 90 percent winning rate can lose big if you have a smaller average winning trade, and a much bigger average losing trade.

For example, suppose a trading system has an 80 percent winning rate with 100 total trades for a period. If the average winning trade is \$100 and the average losing trade is \$500, this results in a net loss of \$2,000. Here, gross profit was $80 \times \$100 = \$8{,}000$, and gross loss was $20 \times \$500 = \$10{,}000$.

Win/Loss Ratio

$$\text{Win/Loss Ratio} = \text{Average Winning Trade} / \text{Average Losing Trade}$$

If your winning rate is 50 percent, and the win/loss ratio is greater than 1, the system is a winning system. If the win/loss ratio is greater than 9, it means that a trading system still can win even if its winning rate is just 10 percent.

Profit Factor

$$\text{Profit Factor} = \text{Gross Profit} / \text{Gross Loss}$$

Among the three factors mentioned here, *the profit factor is the most important.* If the profit factor is greater than 1.0, it means that overall the trading system is a winning system. A profit factor greater than a 1.5 is a tradable system.

Using plain language, what does profit factor mean? The profit factor tells what your odds are in this game. For example, when you play blackjack at a casino, if you bet \$1, and you win, the dealer will give you \$1; if you lose, he will take your \$1. The profit factor

is about 1. What does it mean if the profit factor is 4? It means when you lose, the dealer takes your $1, but when you win, he has to give you $4.

AbleSys Index

Measuring Trading System Performance with the AbleSys Index Your goal in trading should be to maximize your total net profits. Three key factors also can tell how good a trading system you have. These factors are:

1. *Winning rate* = (Winning Trades / Total Trades) × 100%
2. *Win/loss ratio* = (Avg Winning Trade) / (Avg Losing Trade)
3. *Profit factor* = (Gross Profit) / (Gross Loss)

AbleSys Index is used to evaluate the overall performance of a trading system (a trading system is sometimes called a trading strategy). AbleSys Index equals the product of (a), (b), and (c), i.e.,

$$\text{AbleSys Index} = (a) \times (b) \times (c) \tag{5.1}$$

If AbleSys Index = 0.50, it means the trading system is just breakeven. AbleSys Index > 0.50 is a winning system. An AbleSys Index > 1.2 means a tradable system. However, with the AbleTrend system, typically, look for an AbleSys Index > 2.5 as your tradable system. Do not trade any symbol or chart with an AbleSys Index less than 2.5 even though the symbol or chart may be one of your favorites.

Expectation (EXP) Index

EXP Index is another overall factor used to evaluate a trading system. *This index is designed especially for using Money Management.* With Money Management, we want to increase trading size as much as we can. It requires a higher winning rate system and larger win/loss ratio, and a large number of trades.

$$\text{EXP} = [(1 + \text{Win/Loss Ratio}) \times \text{Winning Rate}] - 1 \tag{5.2}$$

EXP = 0 means the trading system breaks even. EXP > 0 means the trading system is winning. EXP > 0.5 means the trading system is tradable. The bigger the number, the better the performance. We suggest trading systems with EXP index > 1.0 to be used with Money Management.

Maximum Drawdown (MDD)

It is very important to be aware of the maximum drawdown (MDD). MDD means the deepest drawdown during the trading process. This number tells how much money you need to have to be prepared for the worst possible situation. Here are the tools that may be used to analyze MDD:

Equity Line The AbleSys Trend trading system can output the account equity line, which is a powerful tool for drawdown analysis. It not only tells you what the maximum drawdown (MDD) is, but it also tells you how long the drawdown lasted. You may plot the equity line chart with the AbleSys Trend software or plot it with Microsoft Excel software; see Figure 5.6.

Interpreting the Equity Lines What do the "equity lines" tell us?

- MDD—tells us the worst case to prepare for in planning the account size
- Drawdown duration—tells the degree to which your confidence may be tested
- Average drawdown—indicates how smooth your path may be

Portfolio Equity Line When you test and output equity lines for a few markets, you may use Microsoft Excel to combine the equity lines to one portfolio equity line. The

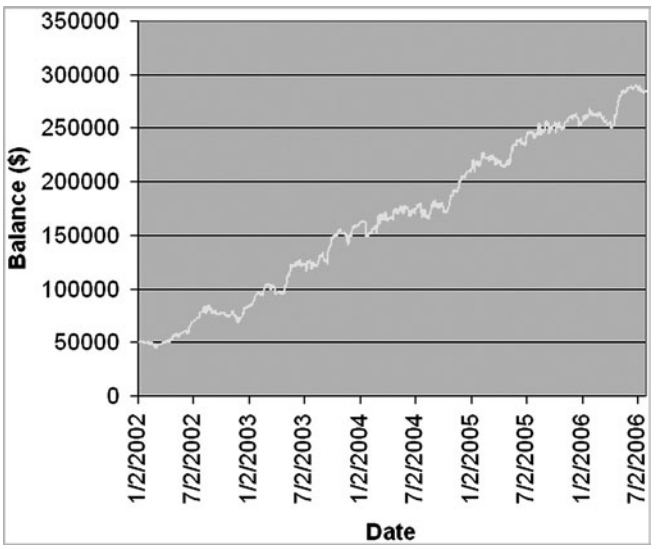


FIGURE 5.6 Example of a portfolio equity line plotted by Microsoft's Excel software. AbleTrend software can output equity line to a text file. Portfolio: AUD/USD, USD/CAD, USD/CHF, EUR/USD, GBP/USD, and USD/JPY daily chart 1/2/2002 to 7/2/2006. Initial account size: $50,000; net profits: $235,543.

portfolio equity line is much smoother than each individual equity line. We explain more about this in Chapter 7.

Reward/Risk Ratio

Reward/Risk Ratio is also called the *R/R* in system evaluation.

$$\text{R/R} = (\text{Net Profits} / \text{MDD}) \times 100\%$$

This is useful in selecting a trading portfolio. Experienced traders normally don't pay too much attention to the Net Profits alone. They are more likely looking for the higher R/R for a trading portfolio or a trading system.

Annualized Percent Return (APR)

Annual Return (AR) to account is

$$\text{AR} = (\text{Net Profits} / \text{Initial Account Size}) \times 100\% \tag{5.3}$$

This index is often used for evaluating the performance of a mutual fund or a trading system. For example, the initial account balance was $10,000, and at end of the year the account balance was $15,000. Then the AR = 50% in the year.

Annualized Percent Return (APR) is different from the Annual Return (AR). It is calculated compound annual return to the account. The relationship is this:

$$(1 + \text{AR}_1)(1 + \text{AR}_2)(1 + \text{AR}_3) \ldots (1 + \text{AR}_\text{N}) = (1 + \text{APR})^\text{N} \tag{5.4}$$

$$\text{Balance at Nth Year} = (\text{Initial Balance})(1 + \text{APR})^\text{N} \tag{5.5}$$

Here, the N means the Nth year (see Table 5.3).

TABLE 5.3 A sample comparison of Annual Return (AR) and Annualized Percent Return (APR). Example results are compiled from an AbleTrend portfolio testing.

Year (N)	AR	APR
1	46.43%	46.43%
2	71.34%	47.57%
3	115.79%	49.41%
4	112.14%	45.30%
5	302.11%	49.54%
6	77.89%	42.17%

FOUR IMPORTANT ISSUES FOR PARAMETER SETTINGS

Earlier in this chapter, we applied the STM or other system to trading using fixed default settings. However, we often receive the following four questions: (1) What's the best time interval? (2) How far back should we back-test? (3) What is the best frequency of calibration? and (4) When should we use fixed versus recalibrated settings?

What's the Best Time Interval?

One of the most common questions asked by traders is "What's the best time interval chart I should use?" As we know, the longer the time chart used, the higher the signal accuracy. I always try to encourage clients to use daily charts or weekly charts. However, many traders go ahead and use intraday charts anyway. In fact, there is no easy answer to the question. It varies for day trading, swing trading or position trading; it also varies for markets: stocks, E-mini futures, commodities, and Forex, etc. There is a lot of homework involved before you should select one. In this section, we give only some guidelines.

Every trader should pick the chart time interval according to his/her own risk tolerance, reward expectation, available time, markets, instrument leverage, and so forth.

Typically, for day trading or swing trading, where the market instrument is heavily leveraged and you have a lower risk tolerance, you may select a relatively shorter time interval. You need to be able to follow the market in real time.

If you have a relatively higher risk tolerance, then swing or position trading might be good for you. You can use longer time interval charts. When you use daily or weekly charts for position trading, you may or may not follow the market in real time. Normally you may check your positions at night or near the market close time, or even check the positions weekly.

Normally, 2- to 5-minute charts are for day trading, 30- to 120-minute charts for swing trading, and daily or weekly charts for position trading. Based on AbleTrend STM, any time interval charts should be fine. Our suggestions here are only for your reference.

Comparisons of using different time interval charts are given in Table 5.4. These are suggestions for day trading, swing trading, and position trading. We also compare under different time intervals, how the time intervals affect signal accuracy, trend duration, reward/risk, efficiency, trading intensity, time consumption, and who should use which intervals.

Two observations for time intervals:

1. The longer the time interval, the higher the signal accuracy. There is a lot of noise in the 2- to 5-minute charts. While using longer time intervals, the noise is about the same, but the price moves are on a much larger scale. This will diminish the influence of the market noise.

TABLE 5.4 Longer Time Interval versus Shorter Time Interval

	Longer time interval	**Shorter time interval**
Day trading	No	2- to 5-minute for E-mini futures 5- to 10-minute for stocks 15- to 30-minute for Forex, etc.
Swing trading	30- to 120-minute charts	30-minute charts or above
Position trading	Daily or weekly charts	No
Signal accuracy	Higher	Lower
Trend length	Longer	Shorter
Anticipated reward	Higher	Lower
Risk tolerance	Higher	Lower
Efficiency	Higher	Lower
Trading intensity	Lower	Higher
Time consuming	No	Yes
Who tends to use this?	Pro and experienced traders	New and novice traders

2. Pro and experienced traders tend to use longer time intervals, but new and novice traders use shorter intervals. It is said that "the time interval used is proportional to the years of your trading experience."

How Far to Back-Test?

A data set containing selected historical data for back-testing is called an **in-sample** data set. A data set containing historical data not included in back-testing is called **out-sample** data set. Future data are out-sample data. When you run back-tests, how far (years or months) should be valid? If you have enough historical data, you may back-test as far as you can. Here, the "back-test" is different from the process to get optimal input parameters for the real near-future trading.

For that real near future trading, it varies for day trading, swing trading, or position trading. In general, it should be as much as you can, *but don't overdo it.* For example, if you use a daily chart, the market behavior in the last 2 years might be significantly different from the market 10 years ago. Since our back-testing is for trading near future, we don't want to use two data sets that are too old. We summarize some suggestions in Table 5.5 as a reference.

TABLE 5.5 Minimum Back-Testing for Near-Future Trading

	Day trading	**Swing trading**	**Position trading**
Trading chart used	5-minute chart	30-minute chart	Daily chart
Length of back-testing (in-sample data)	30 to 90 days	6 to 12 months	2 to 3 years

What Is the Best Frequency of Calibration?

After running a back-testing report for a trading system, you may then obtain the optimal input settings, and apply the trading signals for the near future. A frequently asked question is how often do you run your optimization process? Or how long do the settings hold?

First, make sure you do not over optimize a trading system. You may easily check if the system was over optimized by manually changing the input parameters slightly. For example, there are two input parameters for AbleTrend2—Risk and MoneyRisk. You obtain the values for these parameters by running an AutoScan: for example, suppose you got Risk = 4, and MoneyRisk = 2 to get the best net profits for the last three years. Now you need to manually change the Risk to 2, 3, 4, 5, and 6 to compare results. If the trading system still provides positive net profits, that means you are using a good setting. However, if the system cannot hold, and only the Risk = 2 and 4 are winning settings, but others are losing, it clearly tells us that something is wrong here. Do the same for the MoneyRisk; manually change it to 1, 2, 3, etc., and see whether the trading system still can hold and provide positive net profits.

Frequency of calibration varies from market to market, as well as from day trading to swing trading to position trading, etc. A simple rule is to not run the calibration frequently. If something is working, don't fix it!

In the year 2000, we built a software program to run "Historical Forward Test" (HFT). We go into more detail on the HFT in Chapter 7. Based on the results of our studies, the frequency should be about 1/6th of the in-sample data range. For example, if you run the input optimization with a daily chart of the last 3 years (i.e., 36 months), then every 6 months you may run an AutoScan recalibration. If you run the optimization with a 30-minute chart of the last 6 months, then every month you may run a recalibration. This is only a suggestion for the frequency, not an absolute rule. Our HFT showed it really varies from market to market, and from time to time. We wish trading would be like a science that can be exactly repeated. **But it is NOT.** We have to live with what real trading life is.

When Should We Use Fixed Versus Recalibrated Settings?

In the section 2 of this chapter that discusses STM, we use "fixed" default settings for our trading method. People may ask why the inputs are all fixed. And how do they compare with inputs used for optimization and recalibration?

Concept of Fixed versus Recalibrated Settings "Fixed" parameter or "universal" parameter settings: Generating trades with fixed parameters is based upon running the system input settings, which have been well back-tested over a longer period of time. Although such settings may not be considered "optimal" to run into every future time period in that conditions in the marketplace are bound to change, with patience such settings can prove to be profitable to run over many trades into the future. What fixed or

universal settings might lack at times in the short run, they can make up for in consistency over the long haul.

Note of Interest: Unlike position trading with the daily charts for long-term or midterm trends, swing trading short-term moves (e.g., with a 30-minute chart interval) offers two distinct advantages: There is generally a lower per-trade risk with an increased likelihood of capturing short-term movements provided for by smaller peaks and valleys that would probably go unnoticed when trading the daily chart.

"Recalibrating" or "Rescanning" the Market One of the most commonly asked questions from AbleTrend users is "How often should I perform an autoscan for the input parameters?" If you are trading with fixed settings, you would not perform a scan at all. However, should you wish to be more proactive by anticipating or recognizing a change in market price action, an autoscan or recalibration may prove to be an effective means of managing potential drawdown and increasing total profitability.

Comparisons of using fixed parameter settings and recalibrated settings are summarized in Table 5.6. Basically, recalibrated settings are for experienced traders and a time-consuming process. When you just start, we suggest using fixed settings.

We strongly advise you to spend some time studying the markets you have selected to get a "qualitative sense" of the market's nature. This will help you to determine how to effectively trade it and how often you may recalibrate settings should you wish to do so.

Pay attention to these questions: Is the market showing wide or relatively narrow swing patterns? What kind of range of movement are you witnessing for a daily chart, a weekly chart, or a monthly chart? Is it a better market to day, swing, or position trade? What time interval seems to work best with your chosen market in the long run? Always be cognizant of your chosen market's environment and the resulting parameter

TABLE 5.6 Comparisons of "Fixed" and "Recalibrated" Settings

	Pros	Cons
Fixed Settings	Parameter settings are derived from back-testing long-term data (1 to 5 years). The results are more consistent and reliable.	Will not be optimal settings to trade with during all time periods.
	Objective—not much related to traders.	Requires great discipline, patience, and foresight.
	No recalibrating or rescanning required; system is based upon a fixed model.	Difficult when the system is showing drawdown.
Recalibrated Settings	Recalibrating or rescanning data can optimize trade results and hope to reduce drawdown.	Requires more experience to recognize or anticipate a change in market conditions.
	Works well in a short time period.	Subjective—requires more judgment.
		Requires lengthy historical forward test—a time-consuming job!

settings/rules that will best fit its character. If you find the market to be choppy, or the trend is short-lived, or the trend changes too often, you may consider selecting another more trending market. You will find profitability as a result of your hard work. When you compare yourself with floor traders, or market makers, or specialists, or professional traders, remember that they are "pro" traders who trade and trade only one specific market. They are very familiar with the specific market, and hold all key support and resistance levels in their mind. Let's do our homework as hard as they do.

Trend Trader's Wisdom: Trading is a war composed of many, many battles. If you truly understand and respect the risks involved with your chosen trading methodology, and trade accordingly, your chances for success are great. Our goal is to survive the many smaller battles (losses due to choppy markets). In doing so, we are now in a position to win the bigger battles (gains due to capturing the trend). If we are effective in doing this then we will win the war. Think outside of the box! Think BIG!

ABLETREND2 STOPS

Some trading methods or newsletters do not offer stop values. As we have discussed in Chapter 4, they simply suggest buying a stock and using $500 or a 5 percent loss as protection stops. The software is actually useless if it does not offer stop values for risk management. Your risk in trading will be enormous. The market is live and dynamic, and it moves in its own way. How could a $500 or $5,000 fixed amount stop work? The market's reverses or retracements are not easy to know. A fixed percentage or fixed dollar amount is not appropriate since market price actions will never follow those arbitrary numbers. You need a way to manage your "trade risk." You must find a way to determine the amount of risk that would be proper in a trade.

Michael Marcus, who multiplied his company account by an incredible 2,500-fold over 10 years, commented on stops: "Do you always pick a point where you will get out before you get in? *Yes. I have always done that.* You have to" (Schwager 1989). This is why you should do it, too. The AbleTrend T2 stops are designed for that purpose.

Protection stop values should dynamically trail the trend movement. Stop values should be determined by the market's price volatility and the nature of price actions, not arbitrary ideas. They should also be proven to be winning with back-testing before you can consider using them. Among the dynamic stops, AbleTrend2 (T2) stops are the best among those that we have studied. T2 values are determined according to market price actions and stops are offered in real time, tick by tick and bar by bar. They are proven to yield positive results with back-testing.

Back-Test the Stop Levels

AbleTrend trading algorithms are validated by a full decade of rigorous back-testing. These test charts validate that the signals generated by T2 have produced phenomenal performance.

Developers of trading software design algorithms that they think are the most accurate predictors of future prices, for market indices as well as individual equities and commodities, based on the best knowledge available today.

And there is no way to test whether the software will accurately predict the future because the future hasn't happened yet. But the past has happened. And complete price histories are readily available in databases we can access. So, in back-testing, we take historical data and process it with the exact same algorithm we would use for analyzing today's data.

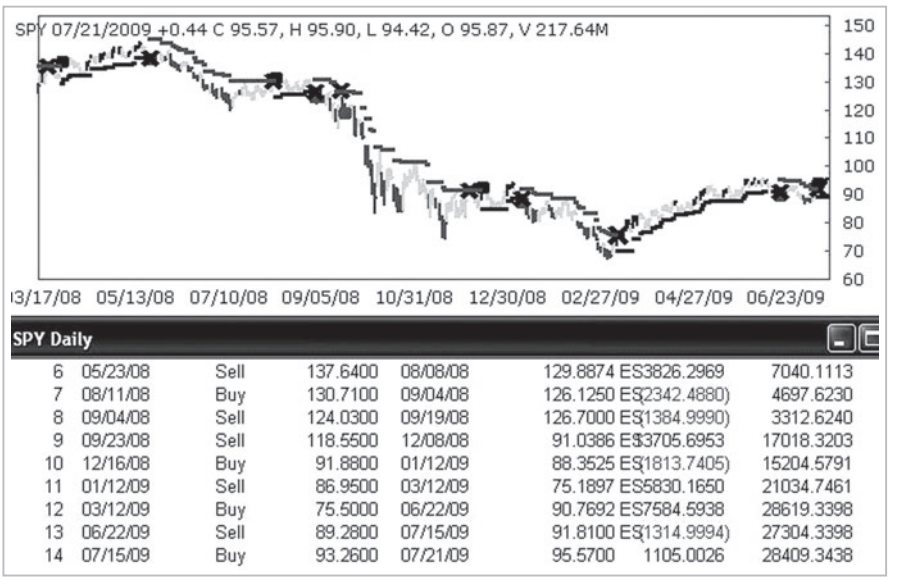
The algorithm then generates buy and sell signals. However, since the buy and sell signals are for a price movement that has already taken place, we can check whether the price rose or fell as the algorithm predicted.

This in turn reveals whether we would have actually made a profit or loss on our trade by following the signals the system would have generated.

Since the T2 signals are precise and mechanical, telling you exactly when to buy and when to sell and where the key support and resistance levels are, and do not require interpretation by the trader, these back-testing results are more meaningful. Back-testing is an easy and reliable way to validate trading software algorithms.

Make sure the trading software you use has been thoroughly and rigorously back-tested to validate the accuracy of its buy/sell indicators. The T2 back-testing capability enables you to validate your signals and strategies before you risk your hard-earned money.

Figure 5.7 shows you a back-testing report for a SPY daily chart. This is a "trade-by-trade" report showing when and at what price each trade was entered and exited. It allows you to compare the results with the chart on a trade-by-trade basis.



6	05/23/08	Sell	137.6400	08/08/08	129.8874	ES3826.2969	7040.1113
7	08/11/08	Buy	130.7100	09/04/08	126.1250	ES(2342.4880)	4697.6230
8	09/04/08	Sell	124.0300	09/19/08	126.7000	ES(1384.9990)	3312.6240
9	09/23/08	Sell	118.5500	12/08/08	91.0386	ES3705.6953	17018.3203
10	12/16/08	Buy	91.8800	01/12/09	88.3525	ES(1813.7405)	15204.5791
11	01/12/09	Sell	86.9500	03/12/09	75.1897	ES5830.1650	21034.7461
12	03/12/09	Buy	75.5000	06/22/09	90.7692	ES7584.5938	28619.3398
13	06/22/09	Sell	89.2800	07/15/09	91.8100	ES(1314.9994)	27304.3398
14	07/15/09	Buy	93.2600	07/21/09	95.5700	1105.0026	28409.3438

FIGURE 5.7 AbleTrend2 is used as protection in this example of a trade-by-trade back-testing report.

The T2 stops are visually displayed as small dots on the chart; the dots appear below the bars for an uptrend, and above the bars for a downtrend. You may simply view the charts and see how accurate they were. T2 provides dynamic stops with back-testing capability. It removes guesswork from trading.

Using Bar Close Price and T2 to Determine the Exit Signals

AbleTrend users have found that in real time, if a trader holds a long position and a bar low touches the T2 stop, it is not a real exit signal. The same is true for short positions: if the bar high touches the T2 stop, it is not a real exit signal, either. Many indicators use bar close prices for their calculations, as does the AbleTrend2 indicator. With live real-time streaming data, sometimes you may see price strikes—creating a bar "high" or "low." If such price strikes hit the T2 stops, it is not significant. The high or low prices of bars contain some random factors. But the "close" price is much more meaningful and reliable, especially a daily chart's closing price. All market forces are settled down at the exchange close time for that price. This is why I trust the close price more. We normally exit long positions only if the bar close price is below the T2 stop, or exit short positions if the bar close price is above the T2 stop respectively.

With this method, the T2 stop accuracy is significantly improved. Following is an example comparing using the OHLC chart (Figure 5.8) with the "Line on Close" chart

FIGURE 5.8 Using the OHLC bar chart with the T2 stops. There are many false hits of the T2 stops. If we exited long positions when the T2 stop was hit, we would be following too many false signals.

FIGURE 5.9 Using the "Line on Close" chart with the T2 stops. The price line connects close prices with a line, ignoring the highs and lows. There are not any false hits to the T2 stops. The line is above the T2 stops. This method significantly improves the accuracy of the T2 stops.

(Figure 5.9). The Line on Close means connecting close prices with a line, ignoring the highs and lows of the bars. You clearly see that the false hits of stops are significantly improved, and the T2 stops are much more accurate this way.

The back-testing of T2 can be as easy as a visual viewing in most cases. For example, plot an OHLC chart with 10-year historical daily data, then add the T2 indicator to the chart. You may quickly count the bars hit or not hit and obtain a rate of accuracy if T2 is used for stops. Also, you may with one click change the chart style to "Line on Close," like the one in Figure 5.9. Then count again. You may now have a very good idea how good or how bad it is if you use T2 as your key reference for support and resistance levels.

THE SWEET SPOT—GOLDEN REGION OF ENTRY

Using the STM, you may enter the market at any time when the T1 and T2 indicators agree with each other, and the T2 stop is within your risk tolerance. However, there are certain entry points that are the best or most favorable, which we call "sweet spots." We first introduced this concept in Chapter 2. We will briefly summarize the rules of sweet spots here and give a few more examples to show the application of this concept in actual trading.

Sweet Spots

When you apply T1, T2, and EMA to a chart, the T2 signals provide "sweet spots"—optimum times to get into a trade. For an uptrend, after the initial buy signal is given, and the market tests T2's protective stops and moves sideways for a while (as indicated by a few green bars), a first blue bar appears, and the bars nearby are above the T2 stops, indicating a resumption of the uptrend. This is the sweet spot for buy (SSb)—a low-risk entry point for the buy position.

For a downtrend, simply reverse the logic. After the initial sell signal is given, and the market tests T2's protective stops and moves sideways for a while (as indicated by a few green bars), a first red bar appears, and the bars nearby are below the T2 stops, indicating a resumption of the downtrend. This is the sweet spot for sell (SSs)—a low-risk entry point for the sell position.

Examples

Here are a few examples of the Sweet Spots showed in Figures 5.10 to 5.12. The big arrows were the initial buy or sell signals, and the small arrows marked the SSb and SSs spots.

DJIA Index 2008 to 2009

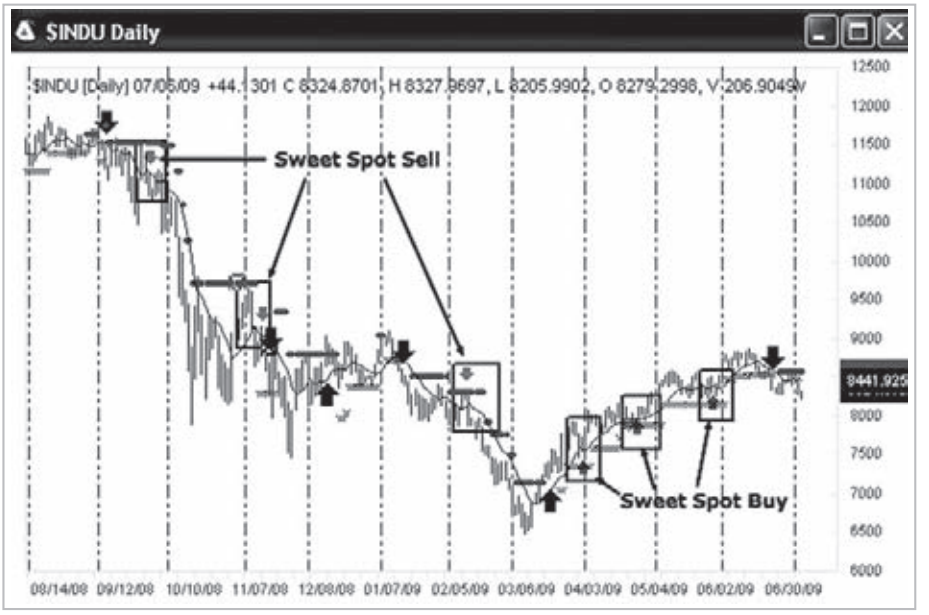


FIGURE 5.10 Sweet Spot buy/sell signals for the DJIA index daily chart 8/14/2008 to 6/30/2009. SSb means "sweet spot buy," and SSs mean "sweet spot sell." Both are marked with small arrows. They provide extra entry points after the initial buy/sell signals marked by big up- and down-arrows. Both SSb and SSs are near the T2 stops, but cannot break out beyond the T2 stops.

Cotton Futures 2008 to 2009

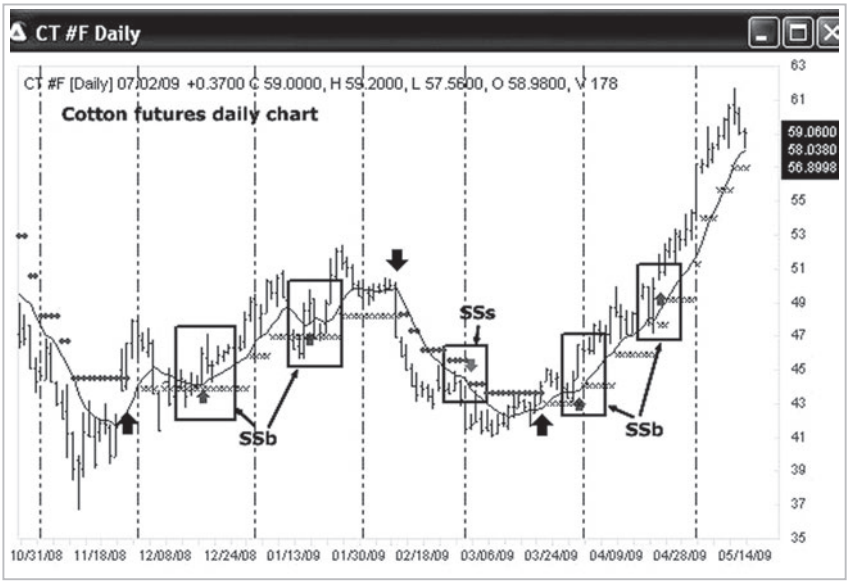


FIGURE 5.11 Sweet Spot buy/sell signals for the cotton futures daily chart 10/31/2008 to 5/14/2009. SSb means "sweet spot buy," and SSs means "sweet spot sell." Both are marked with small arrows. They provide extra entry points after the initial buy/sell signals marked by big up and down arrows.

Goldman Sachs Stock 2009

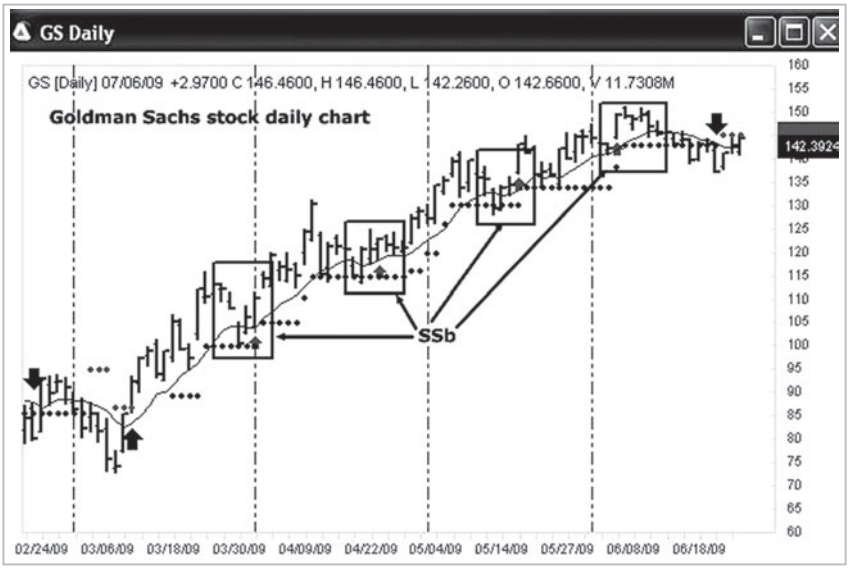


FIGURE 5.12 Sweet Spot buy signals for the Goldman Sachs stock daily chart 2/24/2009 to 6/18/2009. SSb are "sweet spot buy" signals, which are marked with small arrows. These provide extra entry points after the initial buy signals marked by big up arrows.

FINDING THE CHARACTER OF A PARTICULAR MARKET

In the STM section of this chapter, we suggested using default parameter settings for the simplified trading method. This is mainly for simplicity. However, in many cases, traders find that they may do better with specific optimal settings for specific markets.

We have designed into the AbleTrend software an "AutoScan" calibration routine of input parameters to help traders select the optimal parameters for the T1, T2, and EMA indicators. It's easy to understand that S&P 500 index futures, or crude oil futures, or cotton futures, or IBM stock, or EUR/USD Forex market may not all use the same settings for their own best system performance. Each individual market has its own characteristics. The individuals who trade each market are different. Liquidity (trading volume), the margin requirement, and market volatility are also different. Therefore, using specific settings for a particular market is logical and reasonable.

Before going further, we need to recognize:

- Each market has its own character.
- We must understand the character of each market.
- We must determine how best to trade each individual market.

With AbleTrend concepts, fortunately there are only two inputs needed to characterize each market. They are (1) Risk and (2) MoneyRisk.

"RISK" means how sensitive we will set the system to be so that it can best determine a trend change. The RISK level of T1 and T2 can be changed from 1 to 20 or above, with "1" being the most sensitive with minimum delay and "20" or more being the least sensitive. With a larger RISK number, you would stay in a trade longer, and you would need higher risk tolerance. The default value of RISK is 8. Under normal conditions, the default setting should be your first choice. You may adjust the "Risk" level manually or let the AutoScan select it based on your choice for (1) best profits, or (2) best AbleSys index (tradable), or (3) best EXP index (tradable with MM).

"MoneyRisk" is another input for the T2 indicator. This option affects the trend-stop values only; it does not affect the trend determination. MoneyRisk determines how wide a "fence" is built around the current range of prices that will not easily be hit or broken through by market actions. A specific range unit for MoneyRisk is used here. This unit varies with the volatility of the markets and is defined by market movement. When you change this input value, you have the choice to enlarge or reduce the protection stops. The unit size of MoneyRisk varies for different markets. For example, MoneyRisk 1.0 for common stocks means $1.00 per share; MoneyRisk 1.0 for S&P 500 futures means $250 per contract; MoneyRisk 1.0 for Forex currencies means $100,000 per contract, and MoneyRisk 1.0 for T-Bonds means $1,000 per contract.

Why is it necessary to use this special unit? Because it simplifies the process by replacing individual "Symbol Universe Settings" with a more universal unit. There are over 25,000 market symbols in the United States alone. It is hard to check and set up each

symbol universe accurately and individually. Furthermore, when you use third-party data, different data vendors use different symbol names and different units for the same security. Symbol universe settings become very complicated.

The MoneyRisk factor is applied to AbleTrend calculations only when a LONG or SHORT position has profits. When the profit accrued is greater than the set MoneyRisk unit, extra protection for the profit will be activated automatically. The T2 trend-stop will start to tighten the stops. This will also affect the calculations for the low-risk entry points. The default value of MoneyRisk is 2.0 for AbleTrend2. In another words, after the profit for the position becomes greater than 2.0 times the average market movement, AbleTrend will begin to tighten stops. MoneyRisk can be adjusted from 0.5 to 5.0. If you like to use the Fibonacci numbers, you may use them as inputs, such as: 0.382, 0.618, 1.000, 1.382, 1.618, 2.000, 2.382, 2.618.

If you do not want to use this option at all, simply input a very big number, such as 1,000,000. Under this 1,000,000 unit setting, AbleTrend2 will only follow the market's own price actions to decide where to place stops.

If you want to use specific settings for a specific market, the first thing to do is to choose a longer time chart to run back-testing. This works well for daily charts or longer. The chart should go back two to five years. It is not suggested to do so for intraday charts. The accuracy for intraday charts seems not to hold for long. Therefore, it is better to simply use the defaults for those intraday charts.

With capabilities for back-testing reports, AutoScan parameters, and only two inputs required, the results of choosing settings for a market normally hold well for a long time. How frequently is it necessary to run recalibration? As we mentioned earlier, about one-sixth of the in-sample data range should be fine. For example, if the back-testing data range is three years, then every six months you need to run a recalibration for the input settings. For further discussion, refer to the section titled Four Important Issues for Parameter Settings, earlier in this chapter.

TREND TIME FRAMES

You may not have difficulty identifying the direction of a trend by looking at a chart. But one of the biggest issues in trading is the market term you will look at to find the trend—short-, mid-, or long-term. You may have experienced situations like this yourself: When you look at the 5-minute, 15-minute, or 30-minute charts for a market, the trend is clearly down, but on the longer-term daily and weekly charts, the trend is up. So, at this moment in time, should you buy or sell the market?

Of course, the longer the time interval used, the higher the accuracy of the signals. My own experience tells me not to fight the trends on daily charts. When I first started to trade, I was guided to very short-term trading by some pros. People said I would have higher profits and lower risk by using 1-minute, 2-minute, or even tick charts. *This was extremely misleading.* I found out that the real problem using very short-term charts

to trade, in most cases, was that I was fighting against the big trends on the daily or weekly charts. It seems to traders that they are following the trends of 1-minute or 2-minute charts, but in fact they are trading against the long-term trends in many cases. Short-term charts also contain much more market noise relative to the bar-range scale. Traders who use very short-term charts may find themselves in a bad situation most of the time. Therefore, avoid trading against the longer time trends as much as you can. *You may use short-term interval charts as your trading charts, but only trade the directions of the trends on daily or weekly charts.*

Short-, Mid-, and Long-Term Trends

Let's define our terms so we all have a common understanding of what each time frame generally means. For the purpose of illustrating the significance of the time factor, our following examples will fall into three basic time frames. The 2- to 3-week trend is what we will call the short-term trend; the 2- to 3-month trend is what we will call the mid-term trend; and the 2- to 3-year trend is what we will call the long-term trend. The precise duration of each trend time frame will vary for each trader, so remember that the following examples are merely guidelines.

If you use intraday charts, for example, 5-minute to 120-minute charts, you still need to know at least the short-term trend direction, which is the trend for the last 2 to 3 weeks. As an intraday trader, you can ignore the really big picture of the markets, as you might find yourself on the opposite side of the long-term market, which might make it hard to trade. But you should know the short-term trend direction. And if you cannot see a clear trend for the last 2 to 3 weeks, it means the market is very choppy at this time. You need to trade with extreme caution, or simply do not trade this market at all. There are over 10,000 stocks, futures, Forex, etc., to choose from. There must be some markets trending well at any time. We don't have to limit ourselves to one specific market.

The Short-Term Trend (2 to 3 Weeks)

This is the shortest-term trend over the last 2 to 3 weeks on the daily chart, and it can be very useful in determining what direction to trade. Use discretion, however, because the short duration of this trend makes it the most volatile one. Be prepared to alter or even reverse your short-term bias, or opinion, of this trend frequently. If you have difficulty seeing a clear trend for the last two to three weeks, you may need to switch to a bigger picture by "zooming out" or by using a weekly chart. Also, drawing trendlines is one of the most efficient and easiest ways to determine the trend directions.

The Mid-Term Trend (2 to 3 Months)

This is the secondary trend of the daily chart over the last 2 to 3 months, or you may use weekly charts for this purpose. You will find yourself studying this trend more often than any other because this is the trend that gives many traders a clear picture of what

direction to go in. It is less volatile than the short-term trend but does not require the long-term commitment of the next longer-term trend. Use your naked eye or draw a trendline to see the trend. This is the trend upon which you will base the majority of your trading decisions.

The Long-Term Trend (2 to 3 Years)

This is the long-term trend on the weekly chart over the last 2 to 3 years. We call this the primary trend because it reflects the general market direction over a longer period of time and on a larger scale than the others. You should not, however, be biased by this trend to place any buy or sell orders because it is too long. Consider this primary trend to be the backdrop behind the other two more tradable trends. It can be an invaluable map when you use it with the others. If you use daily charts for position trading, you definitely need the long-term trend as a guide to trade the primary trend direction.

Market prices do not conform well to our thoughts; they tend to have a mind of their own. You may look at the sample chart in Figure 5.13 and see that, for the last two years, prices have moved lower, but over the last two or three weeks they have climbed. It is entirely possible to witness a market where each trend time frame has a different direction. For most of us, short-term swing trading should be based first on the 2- to

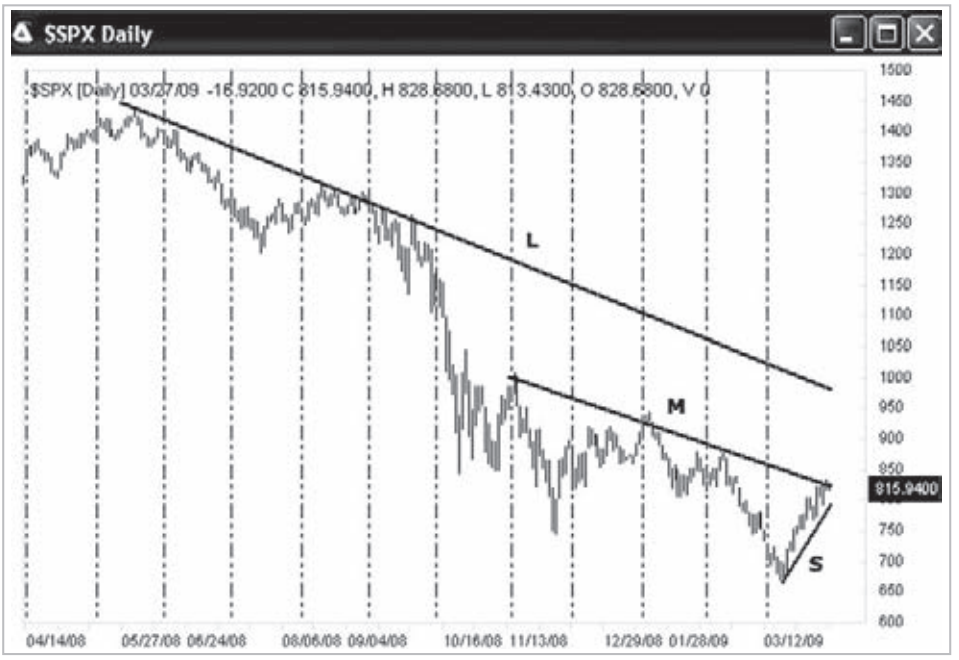


FIGURE 5.13 Example of S&P 500 daily chart 2008 to 2009. Three trend time frames: L means long-term trend, M stands for mid-term trend, and S is for short-term trend. This is why different people trade in opposite directions. People see the markets as they are. This example also shows that the trendlines are one of the most efficient and easiest ways to determine the trend directions.

3-week trend as a guide, and then we should use intraday charts, such as 5- to 30-minute charts, to trade the short-term direction.

Ed Seykota, one of the "Market Wizards" interviewed by Jack Schwager, says one of his clients' accounts were up from $5,000 to 2,500 times that over the period 1972 to 1988 (Schwager 1989); he commented on his trading method, "I am primarily a trend trader with touches of hunches based on about twenty years of experience. In order of importance to me are: (1) the long-term trend, (2) the current chart pattern, and (3) picking a good spot to buy or sell."

Convert Seykota's points to the terms we use in this book, and he's saying to look for these conditions for an entry: (1) long-term trend, (2) short-term trend setup (breakout), and (3) sweet spots or golden region of entry.

AVOID CHOPPY MARKETS

You may have often heard: "The trend is your best friend in trading," or "Don't trade choppy markets." But what is a choppy market? What is behind the choppy market? And how do you avoid it?

What Is Market Noise?

Intuition and common sense tell us that there is more noise associated with short-term movements or fluctuations within smaller time frames of data.

It is a fact of life that stocks or futures markets don't move up and down in perfectly straight diagonal lines; see Figure 5.14. If this were true, we as trend-following traders would have a much easier time of it and we would be many times more profitable. In fact, the movement of a stock's or market's true direction can at times flip back and forth and be difficult to follow.

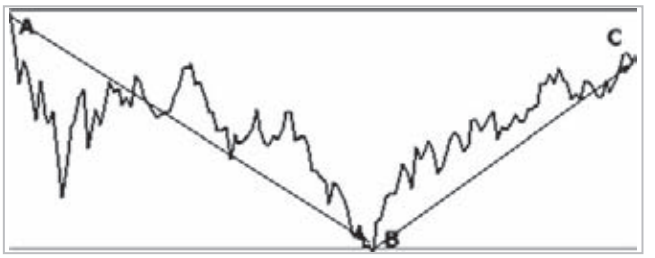


FIGURE 5.14 Ideal moves and market noise. Real moves of the market are from point A to point B, then from point B to point C. However, this general movement can be so confused by the up-and-down market noise along the way that we might lose our direction. Therefore, we need to sit back and see the big picture of where the market is going. By switching to longer time interval charts, you may see the big direction of the market moves. It is like viewing an oil painting: If we zoom in on a small spot, we may lose the sense of the entire picture.

Noise is most readily seen from the perspective of tick-to-tick movement of a particular market. To illustrate this point, if a trader wakes up one morning and decides that he wants to liquidate 1,000 shares of MSFT stock because he needs to use the money to purchase a house, is this considered significant in the overall direction of the stock's true trend? No. In fact, there are many of these insignificant trades taking place for a variety of reasons, which in the short term creates noise in the marketplace.

Another example of market noise: Day traders who get in and out of positions many times throughout the day can create a lot of market noise. And noise is often generated by news—whether inside or published.

Noise is seen at every level of the trend (short, intermediate, and long term), with the most noise occurring in smaller time intervals (such as tick-by-tick or minute-to-minute charts). This noise, in effect, can make it difficult to stay in line with the true direction of a definable trend.

So how much price movement is considered to be significant in defining the start or change of a trend? And at what point does noise have the smallest influence for defining a trend?

The answer to this question is not an easy one.

We have determined that for swing trading, and in many cases, day trading, the stock indices, a 30-minute bar is a reasonable time interval to work with. In any case, following true or definable trend changes should involve a relatively few number of trades. To effectively capture every single tiny up or down move would be next to impossible because there is no real significance to such movement, which is composed primarily of market noise.

The core mathematics of the AbleTrend system purely and simply indicates trend changes based upon the character of the stock or market analyzed. The built-in AutoScan of the AbleTrend system is designed to capture the "core nature of the stock or market." The system then determines how aggressively or not so aggressively it should move the trend stop levels based upon the scan and subsequent incoming real-time price data. The AbleTrend model is based upon fundamental mathematical probabilities (odds) that are determined by the scan.

Understand Choppy or "Whipsaw" Markets

Trading is a game in which each trader defines his or her rules. Therefore, we will trade only when we see the best trend setup conditions, and avoid the choppy market conditions as much as we can. In a trending market, traders see the direction clearly, and play big in volume. On the other hand, under choppy market conditions, traders are confused by markets moving back and forth. Traders normally play small in volume—because no one really knows what's going on.

We will study more about the following issues.

- What is a choppy market?
- Who likes a choppy market?
- Why is trading volume thin?

FIGURE 5.15 A typical choppy market. Prices are restricted in a certain range. Normally, it is hard to know when the choppiness started, but easy to know when it ends. There is always a delay in knowing when the choppy market started. After a while, the narrow range shows up, which informs us that the choppy market is happening. We may clearly know when the choppy market ends by the breakout of the narrow range.

What Is a Choppy Market? A choppy market is the opposite of a trending market; that is, the market has a very narrow range in which the price goes back and forth. See a typical example in Figure 5.15. The market shows no clear direction. Quantitatively, AbleTrend defines a choppy market as one where four or more bars are within a certain range. Don't trade choppy markets. Wait for a breakout of the range, and at that time you will see a trend formation in process.

Who Likes a Choppy Market? The floor traders (also called "pit traders" or "locals") like a choppy market. Most floor traders do not use charts or technical analysis. They remember the key support and resistance levels very well. One S&P pit trader said, "My income is made by trading. The truth is, whatever analysis I did for the market was pretty irrelevant. Over 90 percent of my income doesn't require charts or analysis. I'm just reacting to the order flow. That's the bulk of the typical local's income."

Without charts or analysis, trading the market by watching the order flow, pit traders have their unique way to trade. One way they can count on is never to let the market go against them more than "50 points" (i.e., 0.50 is called 50 points at the floor, or $125 per contract) in S&P futures. They also hold positions for a very, very short time—about 30 to 60 seconds. Average locals trade 100 to 200 contracts a day in the S&P. They consider a 30-point (0.30) profit to be a very good trade. A typical fee for floor traders for a round-trip futures trade is about $0.25 to $0.50.

A famous T-Bonds pit trader trades over 10,000 contracts a day with an average of 4-ticks (^4, or $125 per contract) profits per trade. The trading style of most pit traders is "quick in and out." Therefore, a trending market will be their killer, but a choppy market will be their best friend!

A famous floor trader once told me a story about when he was a pit trader at CBOT in Chicago. He said that if the day was choppy, after trading hours on their way up in the elevators, pit traders were all talking and laughing about the trades they did. Most of them made good money on those days. If the day had a trending market, however, the market went all the way up or all the way down during the day. After the market closed, you could feel the air in elevators—all the pit traders were very, very quiet at that time. . . . You know the rest of the story.

Knowing these stories, what should we do as individual traders?

As individual traders, it usually takes us a few seconds or even longer to fill an order. We cannot feel the order flow or know who is trading what. And the expense for commissions is too high to just run a long series of "in and out" trades. We cannot trade the way floor traders do.

The floor traders soon will become obsolete since online electronic trading already shows the advantages over the floor trading. The scalping day traders act like the old floor traders, but they lack the information of the real pits.

However, we can learn from their ideas about how to cut losses as short as possible. We must improve our methods and learn from pit traders how to: (1) use our charts, (2) use our analysis tools, (3) stay in a trending market as long as possible—"let their panic be our profits," and (4) avoid trading choppy markets.

Why Is Trading Volume Thin? In fact, no one knows what the market direction is during choppy market conditions. Everyone just tries or tests the water with a small position. No one is willing to play big. Experienced and pro traders only play big after they can clearly see the trend—the market direction. At the beginning, they only buy or sell with a small position. If the market goes against them, they exit the position. If they were in a long position and the market was going up, they would buy more; if the market was going up further, they would buy much more. This is called "buy-buy-buy," and explains why the trading volume would be up if the trend were established. This is true for the short positions as well. We would see "sell-sell-sell" accompanied by high volume. But while the market movement is still choppy, trading volume will remain thin.

A very successful trader once said, "If the market goes up, I buy some. If it goes up some more, I buy some more. If it goes up some more, I buy some more. If the market goes down, I sell some. If it goes down some more, I sell some more. If it goes down some more, I sell some more."

So once again, the conclusion is do not trade choppy markets. Choppy markets belong to floor traders. We must use AbleTrend to eliminate trading choppy markets as much as possible.

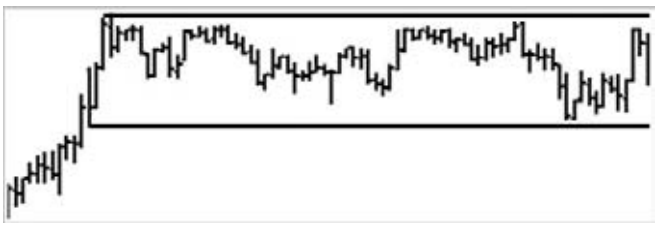


FIGURE 5.16 Example of a sideways channel (choppy market). Market price range is narrow and moves back and forth. Thin volume is associated with sideways markets. Not just you, but everyone during these times is uncertain about the market direction. Traders trade only small lots to test the market. No one dares to play big.

How to Identify Choppy Markets

Our experience tells us that it is easy to identify when a choppy market ends, but hard to know when the choppy market starts (see Figure 5.16). When a market suddenly breaks a long-time narrow range or channel, you may identify the end of a choppy market. But how do you identify when the choppy market has started? In fact, you cannot identify it, because there is always a delay. From my experience, I find that if I have two consecutive losing trades, the first thing that comes to my mind is to check whether the market is choppy or not. Then I normally stop trading for a while. I wait and observe whether the market can break out of the previous range of the last two trades before I resume trading that market.

Sideways Channels and Consolidations (Choppy Markets) As with bull and bear markets, a sideways market will experience periods of acute price fluctuation. When the price action for a particular futures contract or stock is primarily moving sideways, we often call this a channel or consolidation. It is also known as a choppy market condition. A choppy market is the opposite of a trending market; that is, the market has a very narrow range in which the price goes back and forth. The market is not going in a clear direction.

Five Ways to Spot Sideways Markets with AbleTrend

AbleTrend may help traders to spot sideways markets in many ways by marking them in color on price charts. Here are five of the ways:

Consecutive Green Bars T1 and T2 are two AbleTrend indicators that are applied to a chart to analyze trend action. Before adding these indicators to a chart, all bars on the chart are green. The T1 indicator paints the bars blue when it identifies an uptrend, and paints the bars red when it identifies a downtrend. The T2 indicator places a blue dot below the bar when it identifies an uptrend, and places a red dot above the bar when it identifies a downtrend. Since this book is printed in black-and-white, you will not see the colors. Therefore, in Figure 5.17 we use two boxes to show where the green bar regions are. When you use the software, you will see the color of the bars.

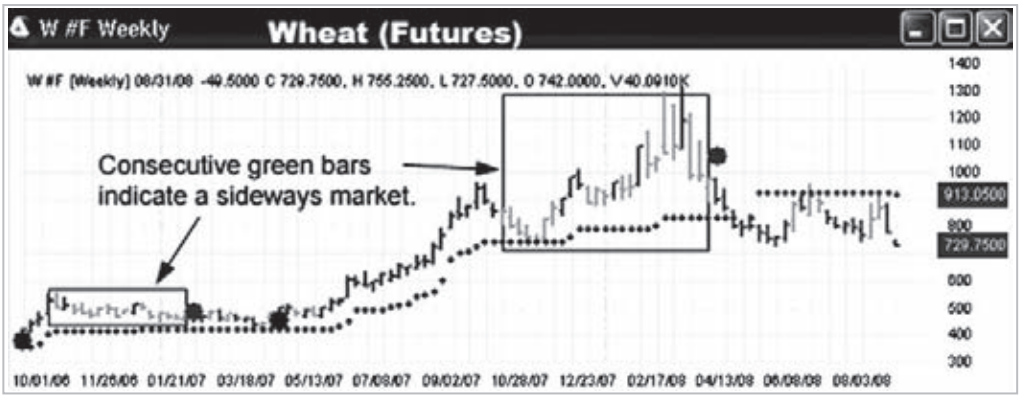


FIGURE 5.17 Choppy areas with green bars, marked with rectangles, indicate a sideways market.

After adding these two AbleTrend indicators to a chart, an uptrend is confirmed when T1 and T2 both show the color blue; a downtrend is confirmed when T1 and T2 both show the color red. When the bars remain green, that means neither an uptrend (blue) nor a downtrend (red) is detected. Therefore, consecutive green bars on the chart confirm a sideways market.

T1 and T2 Showing Different Colors T1 and T2 are independently calculated indicators. When T1 and T2 show the same color, it means the two indicators agree with each other, confirming the trend. For example, if T1 shows blue bars and T2 shows blue dots, an uptrend is confirmed. If T1 shows red bars and T2 shows red dots, a downtrend is confirmed. When T1 and T2 show different colors, it means the two indicators do not agree with each other, and a sideways market is confirmed. Since this book is printed as black-and-white, you will not see the colors. Therefore, in Figure 5.18 we use a box to show the conflicting color for the sideways region.

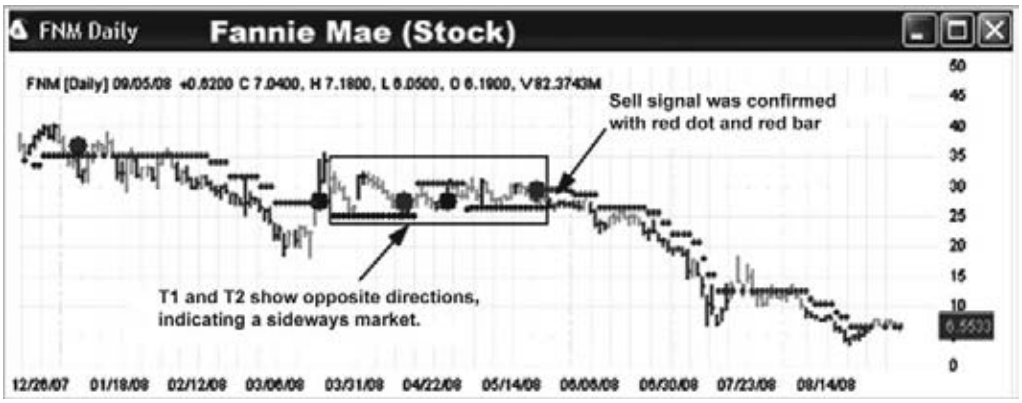


FIGURE 5.18 T1 and T2 bars and dots show opposite directions, indicating a sideways market. This is shown in the area marked by a rectangle.

Frequent Change in Color of T1 T1 paints the bar blue when it identifies an uptrend and paints the bar red when it identifies a downtrend. A market that is uncertain in its direction goes up and down rapidly, leading to frequent changes in the color of the indicator. Therefore, rapid color change of the AbleTrend 1 indicator confirms a sideways market. Since this book is printed in black and white, you will not see the color changes of the T1. Therefore, in Figure 5.19 we use a box to show where the T1 color changes for the sideways region.

Frequent Change in Color of T2 T2 paints the dot blue when it identifies an uptrend and paints the dot red when it identifies a downtrend. A market that is uncertain in its direction goes up and down rapidly. Therefore, rapid color change of the AbleTrend 2 indicator confirms a sideways market. Also see the box in Figure 5.19 for the sideways region.

Two Consecutive Wrong Signals AbleTrend is a trend-following program, which means the system is designed to spot trends early, and keep you in as long as the market is trending. By definition, the choppy markets are the opposite of trending markets. The best practice during this time is to avoid trading; however, we may not know it is a choppy market until after the fact. The quickest way to react to a choppy market is to stop trading after two incorrect signals. When the trend-following program is wrong twice, by definition, the market is no longer trending because it failed to make higher highs and higher lows. Look for breakouts as a signal that the market has returned to the trending condition. Recognizing long-term and short-term trends can still present opportunities if a long-term trend is not apparent; however, this is a more advanced and risky strategy.

After two consecutive losing trades on the opposite directions, stop trading for a while. Draw two lines on the bottom and top of that choppy range as support and

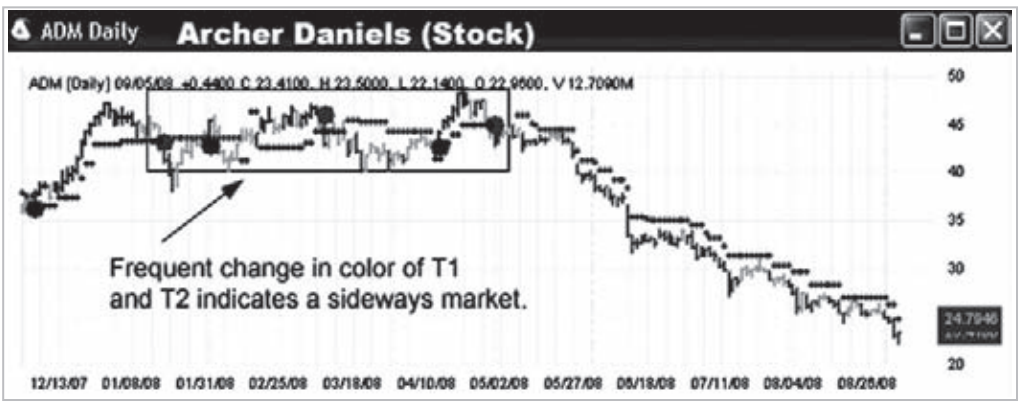


FIGURE 5.19 T1 bars and T2 dots frequently change colors, indicating a sideways market. This is shown in the area marked by a rectangle.

resistance level. If you see prices were forming a consolidation triangle, draw the triangle as support and resistance level. Wait for the breakout of either side to start trading again. You may refer to Figures 6.11 and 6.25 in the next chapter, as examples.

Identify False Breakout

As we mentioned before, when a market suddenly breaks the long-time narrow range or channel, you may identify the end of a choppy market. This is true most of the time. However, as a trader, you must remember there is never a sure thing in trading. There are always exceptions and surprises. For example, see the GBP/USD Forex 120-minute chart in Figure 5.20. The market moved sideways within a range for one month. Suddenly, on June 29, 2009, the market broke the resistance level of the last month. People expected that prices would move higher and that the uptrend would continue. But this was a false breakout. If it had been a real breakout, it should not have pulled back and broken below the previous resistance level (which became support for the possible new uptrend). It also should not have broken below the previous low (marked as "L" on the chart). As soon as prices broke below that low, it confirmed that the uptrend had stopped.

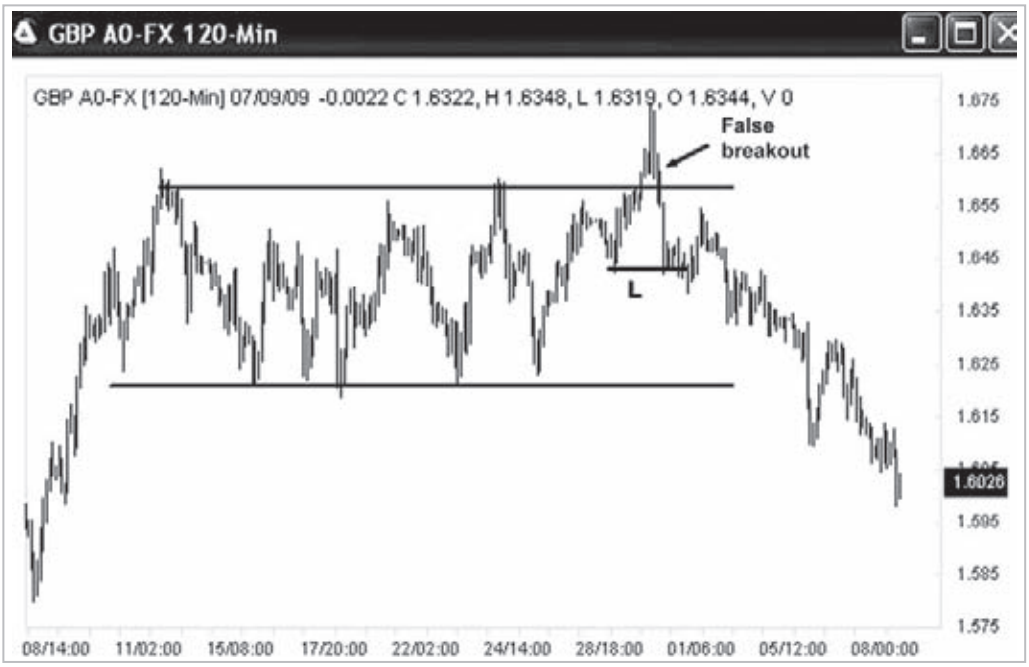


FIGURE 5.20 Example of a false breakout. The GBP/USD 120-minute chart was in a sideways market, from 6/8/2009 to 7/8/2009. Then prices broke above the top of the channel. If it had been a real breakout, it should not have broken below the top of the channel, which was the previous resistance level that had become support for the possible new uptrend. It also should not have broken below the previous low (marked as "L" on the chart). As soon as the low was broken out too, it confirmed that the uptrend had stopped. It was a false breakout.

No Trade Zone (NTZ)

What's NTZ and how can it be used to avoid a choppy market?

When does a trend-following trading system lose money? That's right, losing trades happen when the market is choppy—trendless, moving sideways. Knowing this fact, we may design a "No Trade Zone" (NTZ) to avoid trading choppy markets. The NTZ is a powerful weapon to fight choppy markets.

The concept of trends can be applied to any chart. If we apply the trend concept to an account equity line chart (see Figure 5.6), this would give us a very good idea of when to trade and when not to trade. If the trading system equity line keeps moving up, having higher highs and higher lows, the account equity line is under an uptrend. We should keep trading it. However, if the trading system equity line keeps moving down, having lower highs and lower lows, the account equity line is under a downtrend. At this time, we should stop trading. This is the basic principle of the "No Trade Zone" (NTZ).

Suppose you are long in a market. With the AbleTrend software, you apply the T1 or T2 indicator to the trading system equity line chart, and the equity line will become blue or red according to the T1 or T2. The blue equity line indicates an uptrend and that the market is in a trading zone. And the red equity line indicates a downtrend, and that the market is in the NTZ.

When in a long position, you do not trade when the NTZ line chart is in a downtrend. You do trade as the NTZ line direction is in an uptrend. Depending on market conditions, the NTZ filter may increase profits, but the main goal is to reduce MDD. The fact is, there is really no way to avoid losing trades, but we can avoid suffering big losses. I vividly remember an owner of a brokerage firm who once told me that if we'd had the NTZ sooner, his clients would not have lost 60 percent of the equity in their accounts.

BREAKOUT OR RETRACEMENT

In this section, we will summarize a few methods for differential breakout and retracement.

Trend-Defined Method

When you're in a trade, and the market starts moving against your position, one of two things can be going on. The price action is either a retracement or a reversal of trend. And depending on which it is, your next best step will be very different. First, let's define the difference between retracements and reversals, and then we'll look at a trend-defined method for distinguishing between them.

Retracement A *retracement* occurs when a price tests support or resistance but doesn't signal the end of a trend. During a trend, prices will often move against the overall trend toward the support or resistance level. If the movement is just a retracement, the

price will bounce off the support or resistance, and then continue in the same direction as the original trend.

Reversal A *reversal* occurs when the price breaks through support or resistance and continues to move against the original trend. The price does not bounce off support or resistance but, rather, continues its new direction as it enters into a new trend. A reversal from an uptrend occurs, for example, when the price falls below support and continues to head lower.

Trend Let's review the starting point and ending point of a trend mentioned in Chapter 2. Every trend starts with a "breakout" of a previous price pattern. And every trend also ends with a "breakout" of previous price action. If prices are in an uptrend, watch any breakout of a previous low as a sign of a reversal. If prices are in a downtrend, watch any breakout of a previous high as a sign of a reversal. This will give you an early hint of whether the current price action is a reversal or a retracement. If you don't have any software to help you make the distinction, try this basic method. It works!

Observe Facts, Don't Predict

Perhaps you've entered a market and are holding a long position. But now the market is moving against you. Is this current move a retracement or a reversal? If it's a retracement, it is a temporary pullback, where prices will bounce off support and resume the up direction of the original trend. If it's a reversal, prices will break through the support level and continue to move down against the original trend. As the market moves against them, traders might wonder:

- Shall I surrender and take the loss?
- If not, how much money am I willing to risk?
- Should I set a stop-loss based on a percentage or dollar loss? How do I choose a percentage or dollar loss that will work?
- What if I take the loss and then the market resumes the trend that I anticipated? Do I re-enter the market?
- How about sticking with my original strategy? Maybe I should hang in there no matter how much drawdown I experience.
- Is there a way that I can identify the support levels when I buy?

The last question is the most important! If you knew the market support levels, you could use them to test market strength. When a market tests the support level, if it cannot penetrate that level but instead resumes the anticipated trend, that movement more likely is just a retracement. If you wanted, you could even add to your position at that time. On the other hand, if the market penetrates the support level and closes beyond it, it is likely a reversal. You would do well to exit the position and cut your losses short. Identifying an objective support and resistance level is the key to determining if the current move is

a retracement or a reversal. So now we ask, is there a way to identify objective support and resistance levels?

It is very important that you do not try to predict which direction the market will take; the market must be observed. It will tell you whether it wants to go up or down by its behavior at or near support and resistance levels. We have witnessed too many traders become discouraged because they insisted on predicting what direction the market would take, and found they were unable to, so we cannot stress this enough. The market must be read and not predicted!

You may not immediately see the opportunities that are presented to you once you realize that the market has only two choices when it encounters a support or resistance level, but we will show you precisely how valuable this is. We suggest that you trade near the support or resistance levels—the tops or bottoms; the trendlines; the AbleTrend2 stops. . . . Why? All these levels are "testing points." You will know whether they are right or wrong in a very short time. The market has only two ways to go at the testing points. It either goes up or down. You may tell whether it is a real breakout or just a retracement in a very short time. This is why such testing points are very valuable to trading.

T2—Differentiate Retracements from Reversals

Let's review how to identify support and resistance as we discussed in Chapter 2. Traders use trendlines, round numbers, moving averages, percentage retracements, or a previous significant high or low as support and resistance levels. All of the above are easy to say, but hard to apply in the real trading world.

Here we will introduce a powerful way to differentiate retracements from reversals by using AbleTrend2 (T2) stops as support and resistance levels. You may refer to Figure 5.21 to see how the T2 works for this task.

AbleTrend T2 stops provide objective support levels by blue color dots placed below the price bars, so that well-defined support levels are at your fingertips. The T2 offers the following six advantages:

1. T2 stops are defined by the market's own support levels and are therefore objective.
2. The scientific calculations behind T2 stops are universal, not curve-fitted.

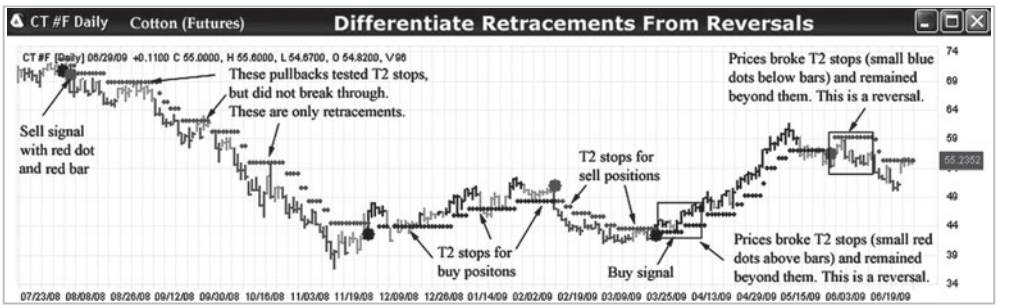


FIGURE 5.21 A powerful way to differentiate retracements from reversals by using AbleTrend2 (T2) stops as support and resistance levels.

3. T2 stops can be back-tested to reveal the characteristics of individual markets.
4. T2 stops are live and updated with each new tick in real time.
5. T2 stops are proprietary, not shareware, and are for the exclusive use of software owners.
6. Successful AbleTrend users around the world have relied on T2. Their common conclusion: "Never fight T2 stops."

The market is always changing, but the way T2 works remains unchanged. Once traders see it work time and time again, they know that they can rely on it and utilize it. That's the value of the legendary T2 stops. The method is timeless. AbleTrend T2 stops can help traders thrive in today's volatile markets.

When using AbleTrend stops as the key support and resistance levels, we have a better way to identify whether we are looking at a breakout or a retracement. As we know, it takes four prices to define a bar—open, high, low, and close prices. We always use close price for this test. We don't pay too much attention to the intrabar activity. For an uptrend, if the bar closes below the Trend2 stops, it is considered a breakout. However, if the bar close price remains above the Trend2 stops, it is still a retracement. It is the same for the downtrend: if the bar closes above the Trend2 stops, it is considered a breakout. However, if the bar close price remains below the Trend2 stops, it is still a retracement.

Market Price Testing Support and Resistance

Market prices are always seeking and testing support and resistance levels. Think of the market as a ball, which bounces off these ceilings and floors. These support and resistance levels form the parameters within which prices oscillate.

Consider a retracement in a downtrend, where prices begin moving higher, but then reach a resistance level you have drawn. You watch closely and see that prices do not have enough strength to violate the resistance level, so they turn back and move lower, resuming the downtrend. They should continue to fall until they are met with the next level of support. They *may* hold at this support level or they may retrace again and go higher, and once again we watch to see if they break through resistance. This price action is an ongoing phenomenon. A market is *always* testing its support and resistance levels. All you have to do is identify them correctly!

Once a market has broken through a trendline or any other form of support or resistance, there is usually the tendency for the market to go back to the violated area and test it again. This is like a criminal returning to the scene of the crime. Look closely at almost any chart and you will see just how common this is. This phenomenon is called a return move.

This brings us to the next important lesson of support and resistance. Once a support level has been violated by a breakout, the old support level now becomes resistance. The same holds true for resistance; once it is violated by a breakout it becomes a future support level. This is very important to understand, and it is basically what the market is doing when it performs a return move. It has broken support, but it goes back and tests that same level, but this time, it is resistance.

TABLE 5.7 Comparisons of Day Trading and Swing Trading

	Day Trading	Swing Trading
Number of trades	2,861	1,340
Average trade	$230	$893
Profit factor	1.257	1.675
Net profits	$658,479	$1,196,965

DAY TRADING VERSUS SWING TRADING

The often stated advantages of day trading are misleading. People say the advantages of day trading are: (1) low risk, smaller losing trades, and (2) low margin requirement. I hear that some traders have more than 100 trades a day, getting in and out of markets; however, they don't make more profit this way. The ones who really benefit are the brokers who are making a living from the commissions on all these trades. When you search the Internet, it is easy to find reports that 90 percent of day traders lose money.

The major difference between the two trading styles of day trading and swing trading is that day traders must exit all positions before the market closes. They do not hold any positions overnight; swing traders will. The comparison presented in Table 5.7 is from our back-testing reports conducted in 2002. This is an example of trading NASDAQ 100 futures, 4/12/1996 to 5/20/2002 (six years); $100 cost per trade was deducted from each trade.

From the comparisons in Table 5.7, you may know why I prefer swing trading or position trading over day trading. I find that many trends continue overnight. Just imagine, if the DJIA index was up 100 points in a day, who would be panicking at night? That's right, the sellers, not the buyers. What would they more likely be doing at night? They would be nervous and would possibly exit their positions. What's the action when sellers exit the short positions? Yes, they will buy to exit their short positions. Those who are still holding their long positions will be relaxing. The reward of holding overnight is greater than the risk involved in most cases.

IN CONCLUSION: THE FIVE F'S OF DESIGNING A TRADING SYSTEM

The key elements in system development can be summarized in five F's, which we designed AbleTrend to fulfill:

1. **Fundamental**

   Is the market like a freeway system or like a wilderness? If it is a freeway system, you can go wherever you want to go if you have a road map. But the reality is

that the market is more like a wilderness, and so we need what might be called a trading compass to help us navigate today's challenging markets. A compass is an invaluable device that is constructed to respond to the earth's magnetic pull. That pull keeps the compass pointing inevitably toward true north no matter where you put it. The critical implication here is that there is an objective reality to the concept of true north. There is something external to the compass itself that is real and affects the compass in a consistent way. As a result, when a man wanders through a wilderness, he can rely on his compass as something steady, dependable, and essentially changeless that can guide him in the right direction. It is the same when wandering through the trading wilderness. If you have a compass to keep you on track, you are not thrown off by change. On the contrary, you have the means to profit from change—and the more competitive the environment, the greater your advantage. As we discussed in Chapter 4, we need something basic and fundamental—a universal, simple, time-tested, trend-following method to meet the always fast-changing market. AbleTrend is the trader's compass.

2. **Focused**

   In the early 1990s, crucial market data was too expensive for the nonprofessional trader to obtain. And even if you could get it, the tools for analyzing such data were simply not available. But thanks to recent technological advances, financial data and the means to analyze it are easy to obtain, completely changing the possibilities for even the average trader. However, the way you collect, analyze, and process market information is a major factor in determining whether you succeed or fail in the markets. Some trading tools are overcomplicated. There are products on the market that provide users with 10 to 20 indicators to choose from, which makes it very difficult to arrive at trading decisions. It is essential not to clutter your mind by trying to pay attention to everything, but instead to develop the skill of focusing on the essential. A good system should be designed to do this for you. It should provide the two most essential elements that a trader really needs: trend direction and stop placement. It's vitally important for a trader to have a properly directed focus. A good system provides a well-integrated flow of information at your fingertips at the right time. Therefore, you are alert to the most relevant market information and your system blocks out the information that isn't important to you.

3. **Flexible**

   A good system must have a built-in feedback loop enabling a trader to adapt quickly and constantly to change. The feedback loop must be in consideration of market direction, volatility, price range, and momentum. The old indicators are inflexible; let's take Moving Average: They don't try to tell what SHOULD happen. However, they are arbitrary, because you need to set the length of the time frames and they do not adapt dynamically to the market.

4. **Fast**

   Time is of the essence in trading. A good system must provide early recognition of the meaningful market trend. A trend is not a trend unless it is on its way. The key

is early recognition of an early stage of the trend. There is always a delay if using any indicator. The fastest way is the definition of trend itself. The information is from the market price, and the price action alone. As soon as you see the right breakout, you may identify a trend instantly.

5. **Friendly**

   A good system must be easy to use, and it must be visual. Graphic user interfaces play a big role. We will say more about applications and trading software design as well in Chapter 7.

CHAPTER 6

Examples of Trend Analysis

When the best scholars hear of Truth, they forthwith sedulously practice. When the average men hear of Truth, they are unimpressed. When the low type of men hear of Truth, they greatly deride. If these men do not deride it, it is surely not the Truth.

—*Tao* by Lao-tzu

Educators say that the way people really learn a new concept is by repeating the same idea seven times through different presentations, applications, and examples. This chapter presents specific market examples, using charts to explain how the trend-following method works when applied to an assortment of common markets.

For each sample market, we will first look at how it is possible to use trend-trading concepts to identify and analyze market trends using the naked eye. Then we will apply the AbleTrend indicators to the chart so that you can see how precisely and how early in the trend AbleTrend reads price action as it unfolds. Using AbleTrend indicators, traders can get the full picture on any market almost instantaneously so that they can trade with confidence.

Our examples will cover a full range of trading alternatives, including stocks, commodities, E-mini index futures, Forex, and bonds.

STOCKS

Stock trading is the most popular in trading. Three examples of trend analysis along with AbleTrend are presented here. They are the GE daily chart, the AIG weekly chart, and the BAC 15-minute chart. We first use trend definition to pinpoint the trend starting and ending points on each chart, then compare and view the analysis by AbleTrend.

Case 1

Let's begin by reviewing one of the market's most highly traded stocks—General Electric (symbol GE). GE is one of the 30 stocks included in the Dow Jones industrial average (DJIA) index. The daily charts that follow show GE from the years 2008 and 2009.

Summary: We are going to use the daily chart to analyze GE's mid-term trend. First we will pinpoint when the downtrend and uptrend started using a traditional method. Then we will look at the trading signals that appear when we apply AbleTrend indicators to the chart.

Figure 6.1 is the GE daily chart from 5/19/2008 to 5/19/2009 (one year). Where do you think the major downtrend and uptrend started? Please mark these points on this chart.

Trend analysis will be completed using Figures 6.2 to 6.4. We focus on Zones 1 and 2 for the downtrend and uptrend.

In Figure 6.5 we look at the GE chart with the AbleTrend indicators applied. We see that the AbleTrend software presented a sell signal on 8/25/2008 and a buy signal on 3/17/2009, a few days ahead of the buy and sell points we determined by using classic trend analysis.

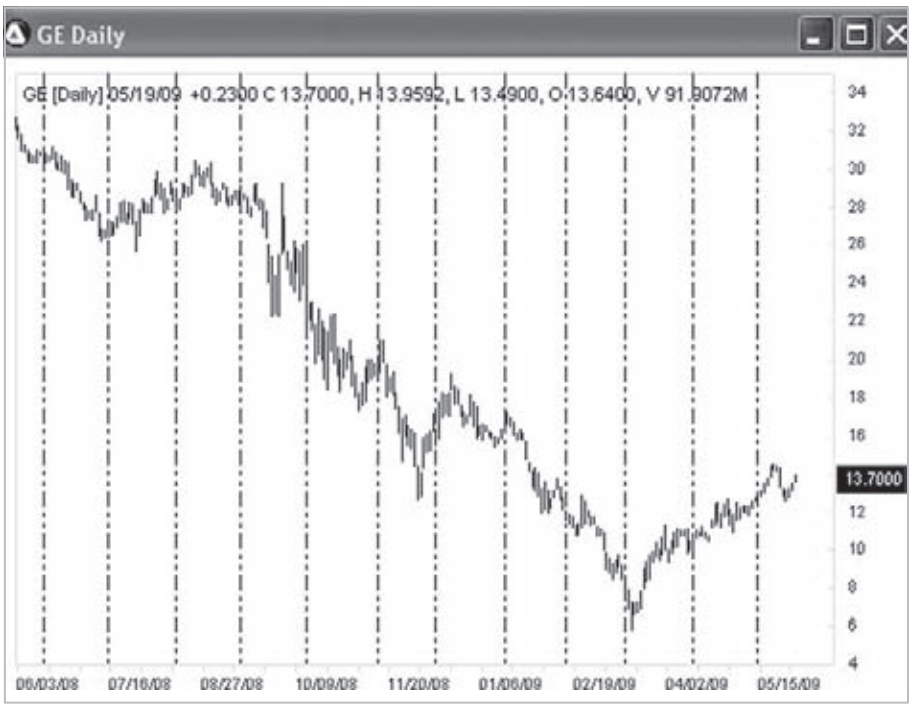


FIGURE 6.1 GE daily chart from 5/19/2008 to 5/19/2009.

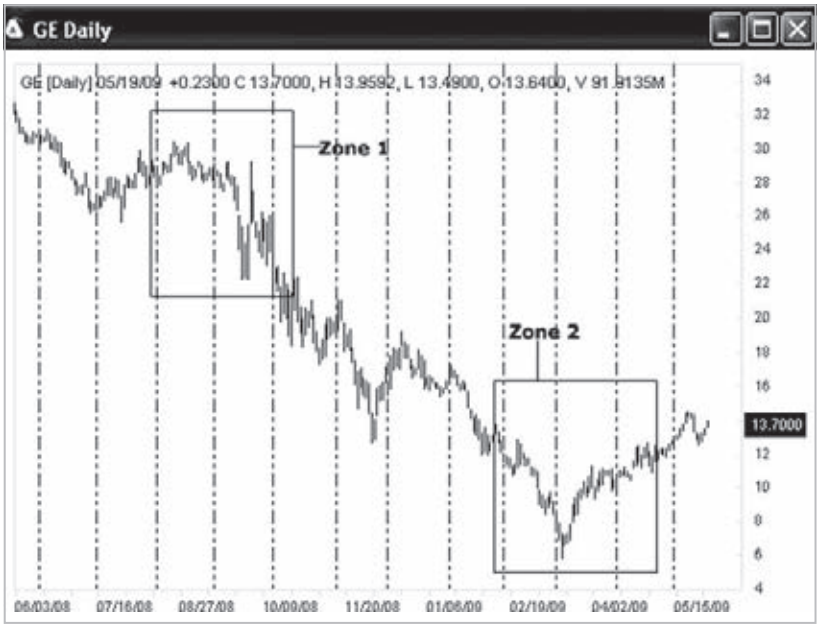


FIGURE 6.2 A step-by-step trend analysis based on the concepts of Chapter 2. Let's focus on Zone 1 and Zone 2 marked above. A downtrend started in Zone 1, and an uptrend started in Zone 2. Can you mark the specific points at which these trends started?

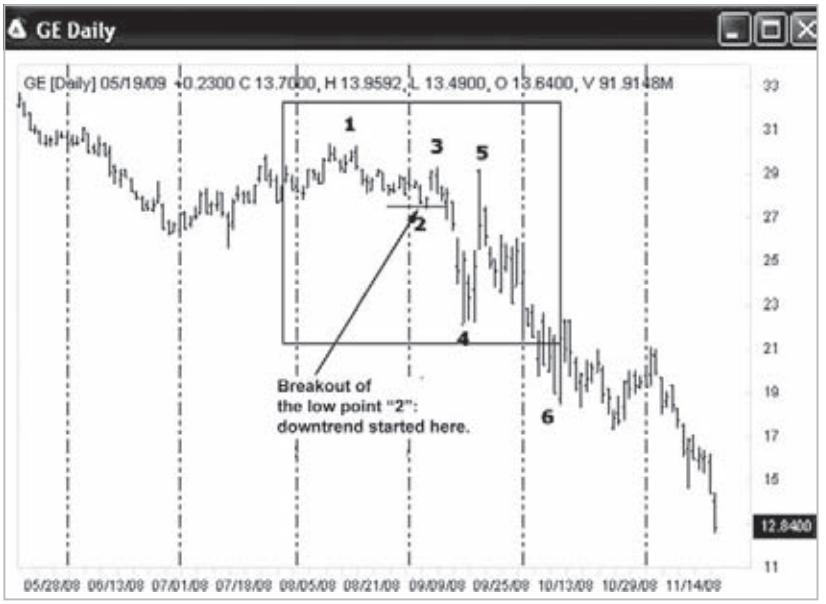


FIGURE 6.3 Zone 1 trend analysis: Let's ignore the small waves before and after point 1. We marked the low as point 2. After point 3, when prices broke below the low point 2, we saw lower highs and lower lows, which tells us the downtrend started from the breakout below point 2 on 9/11/2008. Points 5 and 6 show the continuation of the downtrend. When we do a trend analysis, we need to focus on the big picture and identify the big "waves" or "turning points."

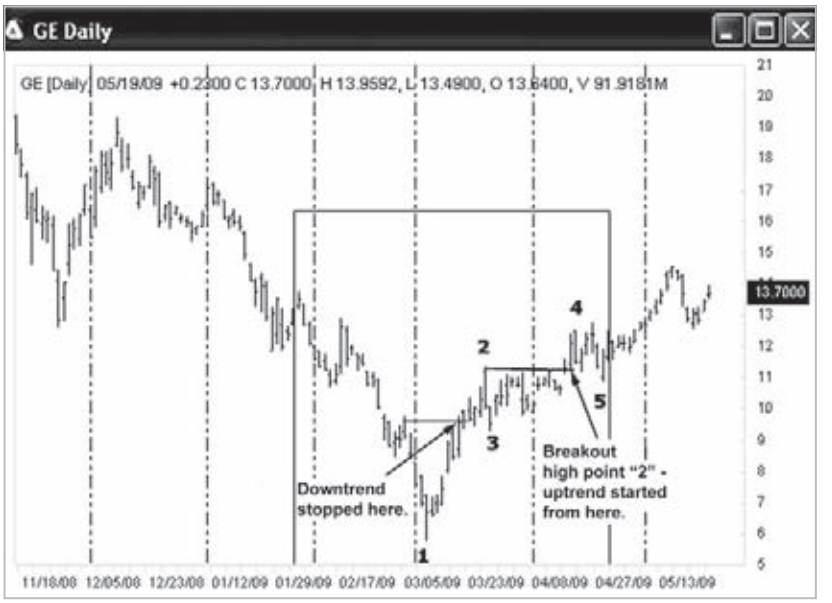


FIGURE 6.4 Zone 2 trend analysis: Now we'll zoom in on Zone 2. First we see that after point 1, GE broke above its previous high, which means the previous downtrend stopped there. We marked the low as point 3. A few bars beyond point 3, we had higher highs and higher lows. The uptrend started from the formation of point 3. Then, when GE broke above point 2, we may say the uptrend was confirmed. So, the uptrend started at the end of March 2009. Points 4 and 5 show the continuation of the uptrend.

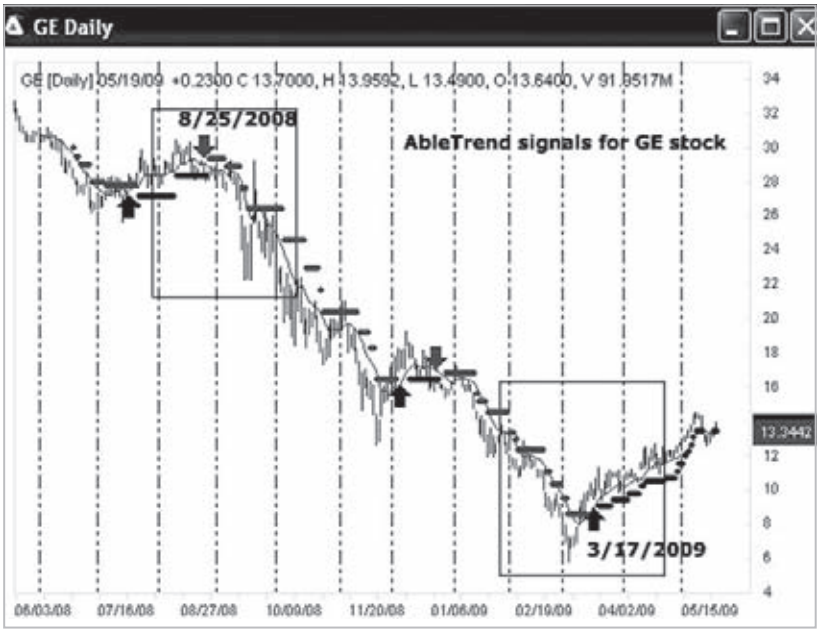


FIGURE 6.5 The GE chart with the AbleTrend indicators applied.

Case 2

In trading, weekly charts are typically used to analyze long-term trends. AIG (American International Group) is one of the 30 stocks included in the Dow Jones industrial average (DJIA) index. It was a key symbol of the financial crisis in 2008 in the United States. The U.S. government laid out over $200 billion from 2008 to 2009 to save this company. Now, the U.S. government holds 90 percent of the stock shares of the company.

Summary: We are going to use the weekly chart to analyze AIG's long-term trend. First we will use traditional methods to pinpoint when the downtrend started in 2007. Then we will see what trading signals appeared with the application of the AbleTrend indicators. Some people lost 99 percent of the value of their holdings by holding on to this stock. With our trend analysis, it might have been possible to avoid such losses.

Figure 6.6 is the weekly chart of AIG stock for the last three years (2006 to 2009). Let's do a trend analysis for it. The price broke out below the previous low in early 2007, which was the first sign that the uptrend had stopped. Can you mark the specific point at which the downtrend started?

In Figure 6.7, the AIG weekly chart showed a "1-2-3-4" downtrend formation in mid-2007. As soon as the market broke out below the low point 2, the downtrend started and we marked it on the chart. The points 5 to 12 keep showing lower highs and lower lows as the downtrend proceeded. Note the AbleTrend buy and sell signals that have been

FIGURE 6.6 AIG Weekly chart. Can you mark the specific point at which the downtrend started?

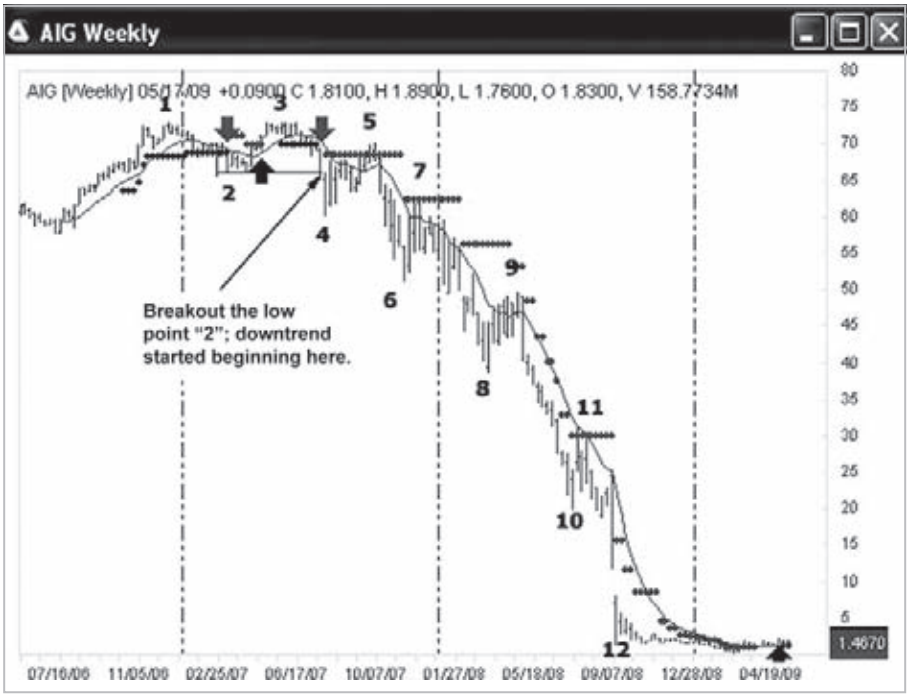


FIGURE 6.7 The AIG weekly chart showed a "1-2-3-4" downtrend formation in mid-2007.

plotted on this chart. Near point 5, an uptrend looked like it was trying to form. You may see the price went above the T2 stops. However, when prices broke down below the low, the uptrend formation failed, and the downtrend continued. This is a classical downtrend case.

The financial crisis started in September 2008. However, with the AbleTrend analysis shown here, we can see that the downtrend on the weekly chart actually started back in July 2007, one year ahead of its becoming manifest. Also, note the longer the time interval used, the more signal accuracy. Weekly charts normally can be used as guidance charts when trading daily charts.

Case 3

For short-term swing trading, we normally use 15-minute charts. Here is an example for the stock of Bank of America (symbol: BAC). BAC is one of the 30 stocks included in the Dow Jones industrial average (DJIA) index. Looking at the 15-minute charts of BAC, we will see how a trend changes into a choppy market.

Summary: Now we will use 15-minute charts to analyze Bank of America stock for short-term trends. Using traditional methods, we will first pinpoint when the well-defined downtrend stopped. After two consecutive losing trades, the market turned choppy. Also

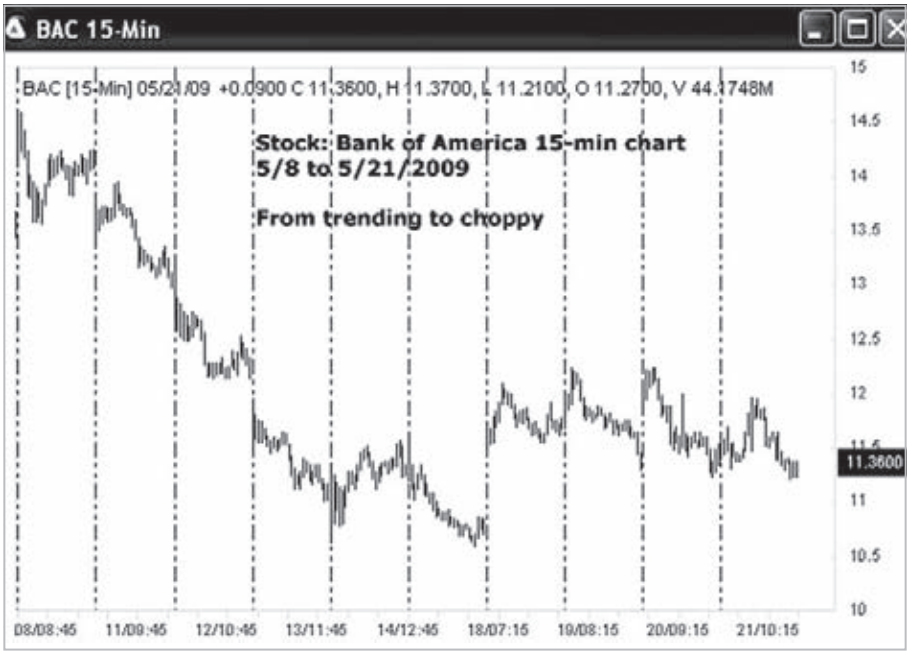


FIGURE 6.8 Bank of America (symbol: BAC) 15-minute chart. Here, the label "08/08:45" means date 5/8/2009, time 8:45 A.M.

we will see the trading signals that appeared with the application of AbleTrend indicators. This example illustrates why, after two consecutive losing trades, it is wise to stop trading for a while and watch whether the market is trending or choppy.

Figure 6.8 is an example of the Bank of America (symbol: BAC) 15-minute chart. Can you mark on this chart where the downtrend stopped? Where did the choppy market start?

We will study how a trending market turns to choppy by analyzing charts in Figures 6.9 to 6.11. We will focus on the right side of the chart to study the choppy conditions.

In Figure 6.12 with the AbleTrend signals applied to the chart, trending and choppy market conditions are clearly indicated. Within very short time intervals (about 10 bars), we see up and down arrows with opposite colors, which tells us to stop trading for a while. If we can avoid choppy market conditions, then we may significantly improve our trading results. Also, if we have two consecutive losing trades, it may indicate a sideways market ahead. In these conditions it is better to stop trading, observe for a while, and wait for a breakout of the price range. If we have two consecutive losing trades that are on the opposite sides (one buy and one sell), we had better stop trading for a while because it is more likely a choppy market. Draw two lines for the market range, then wait for a breakout of the range to resume trading.

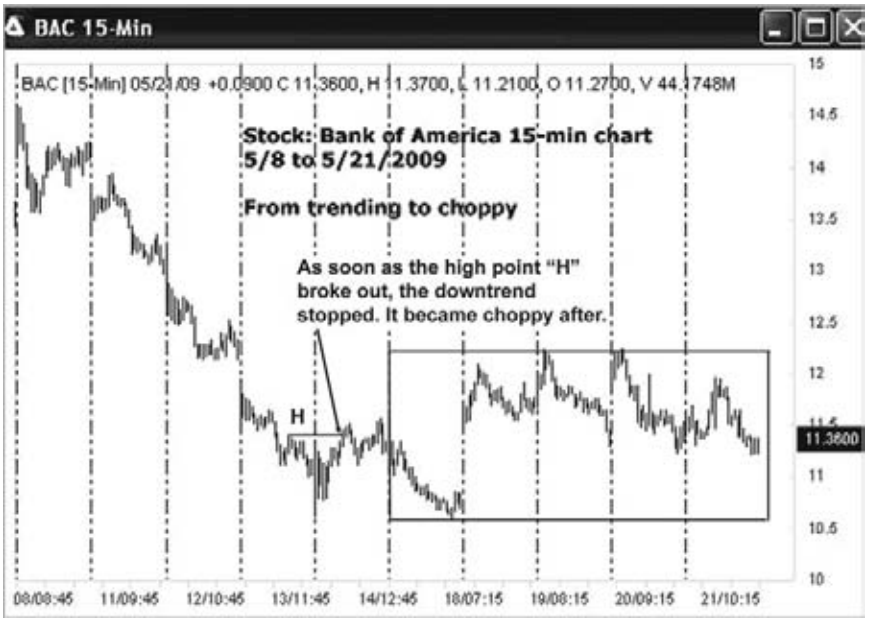


FIGURE 6.9 Downtrend started on 5/8/2009 and continued until 5/14/2009, when the high at point H was broken above, and the downtrend stopped. We don't see any "lower highs" after that point. After that, the market tried to have higher highs and higher lows in order to start an uptrend. But it failed immediately by presenting a lower low. The market became choppy from the left edge of the box that we have drawn on the chart.

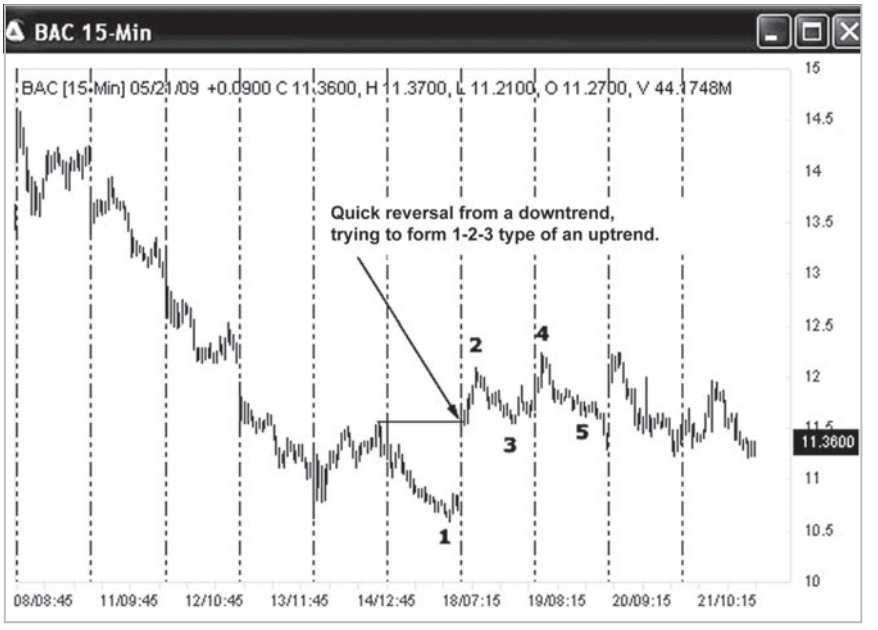


FIGURE 6.10 Quick trend reversal of a downtrend (see where we marked this on the chart). Prices broke the previous high, and we started to count point 1 as the low. After point 3, the uptrend started with a series of 1-2-3 points, and it was followed by a higher high (point 4). Point 5 would appear to be a good entry point for a long position. But the uptrend failed immediately after point 5. First, a downtrend failed, and then an uptrend failed. This gives us a big hint that the market has turned choppy.

FIGURE 6.11 This chart offers two possible trades. The first is a sell on 5/14/2009, after the 1-2-3 downtrend formation. The second is a buy on 5/19/2009 at point 5 after the 1-2-3-4 uptrend. The fact that both trades were losing told us the market was choppy. We know we had better stop trading for a while after having two consecutive losing trades in opposite directions (one sell trade and another buy).

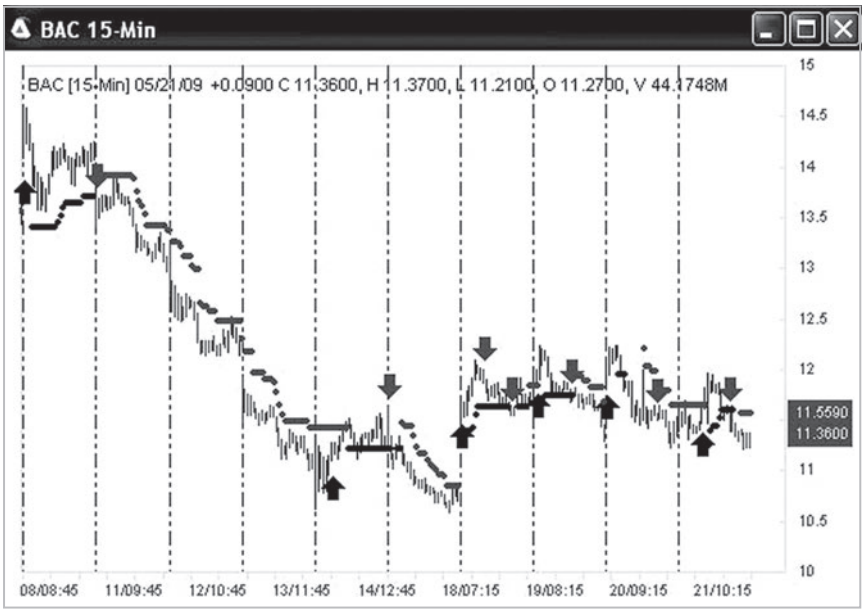


FIGURE 6.12 With the AbleTrend signals applied to the chart, trending and choppy market conditions are clearly indicated. In these conditions it is better to stop trading, observe for a while, and wait for a breakout of the price range.

COMMODITIES

Commodity trading is the most important hedge in trading. There are over 40 commonly traded commodities in the United States through CME, CBOT, NYMEX, ICE, COMEX exchanges, etc. Three examples of trend analysis along with AbleTrend are presented here. They are crude oil futures weekly chart, cotton futures daily chart, and gold futures 15-minute chart. We first use trend definition to pinpoint the trend starting and ending points on each chart, then compare and view the analysis by AbleTrend.

Case 4

For mid-term swing trading, we normally use daily or weekly charts. We will now look at an example for light sweet crude oil futures (symbol—CL at NYMEX) over the last three years. A mid-term trend is a trend that lasts two to three months or more. Let's see how to analyze the crude oil chart, and learn how to recognize what the market is telling us along the way.

Summary: We will now use a weekly chart to analyze mid-term trends of crude oil futures. We will pinpoint when the well-defined uptrend started in 2007, when the downtrend started and ended from 2008 to 2009, and when a new uptrend started in early 2009.

With our knowledge of trend analysis, you may do better than most of the professional market analysts. See Figure 6.13. It is the weekly chart of crude oil futures from 6/10/2006 to 6/10/2009 (three years). When oil reached a price of $70 per barrel in October 2007, some top analysts predicted it would drop to $30 per barrel based on falling demands. And when oil reached a price of $100 per barrel in May 2008, some top analysts predicted it would shoot up to $200 per barrel in one year. How would you analyze this chart? Can you mark the specific points at which the uptrend or downtrend started or ended?

Here is our analysis for the crude oil futures. In Figure 6.14, pay attention to when each trend started as we marked on the chart. **(1) In early 2007**, an uptrend started in 1-2-3-4 fashion. As soon as the breakout of a high—point H1—occurred at $60 per barrel, we saw higher lows and higher highs, indicating the uptrend had started. **(2) In July 2008**, when prices broke the low—point L1—at $125 per barrel, it indicated the previous uptrend stopped. **In October 2008**, when prices broke the low—point L2—at $110 per barrel, we saw the 1-2-3 points that indicated the start of the downtrend. **(3) In March 2009**, when prices were breaking $50 per barrel, we saw 1-2-3-4 points and the beginning of the uptrend. As soon as the breakout of the high point—point H2—occurred at $50 per barrel, we saw higher lows and higher highs, indicating that the uptrend had started.

Figure 6.15 shows the crude oil futures weekly chart with AbleTrend1 and AbleTrend2 indicators applied. Up-arrows were buy signals of the T1 indicator, and down-arrows were sell signals of the T1 indicator. The small dots are protection stops of the

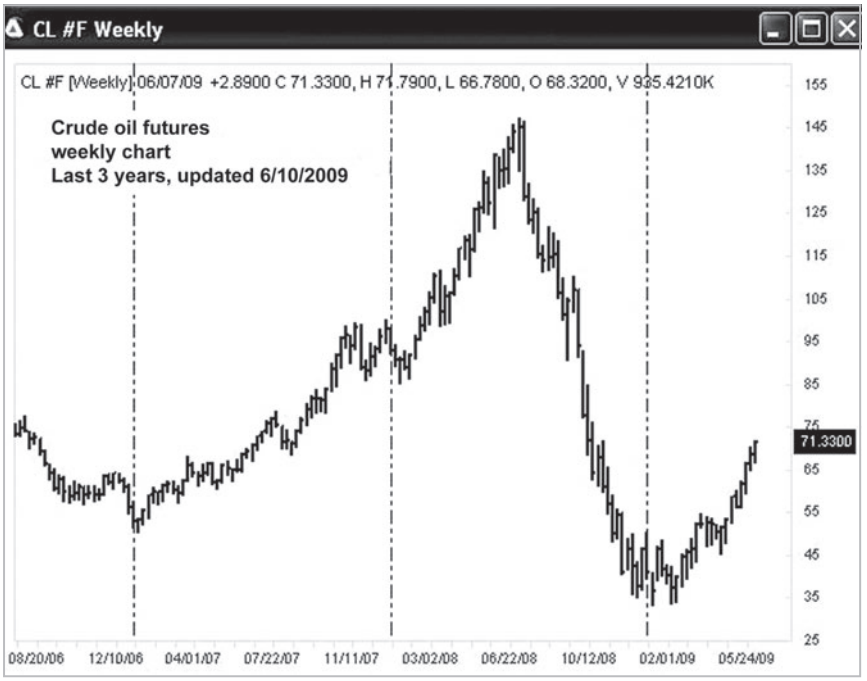


FIGURE 6.13 Weekly chart of crude oil futures from 6/10/2006 to 6/10/2009 (three years). Can you mark the specific points at which the uptrend or downtrend started?

FIGURE 6.14 Pay attention to when each trend started.

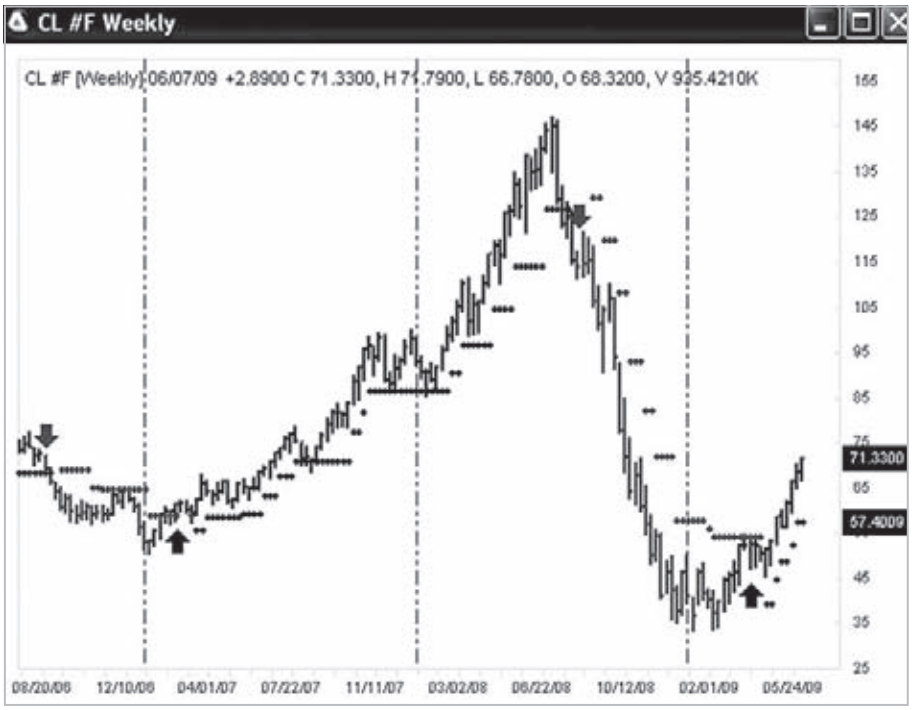


FIGURE 6.15 Crude oil futures weekly chart with AbleTrend1 and AbleTrend2 indicators applied.

T2 indicator. AbleTrend did a nice job: buy on 2/18/2007, sell on 8/10/2008, then buy on 3/29/2009. Here, oil 1.0 move corresponds to $1,000 per contract.

Figure 6.16 is the crude oil futures weekly chart with trendlines, from 6/10/2006 to 6/10/2009 (three years). This example shows how easy it is to draw trendlines with the guidance of AbleTrend2 stops. All the trendlines—L1, L2, L3, L4, and L5—were based on the T2 dot key levels of the last two to three months for the mid-term trendline. We connected the most significant T2 dots (the more dots line up, the more significant the trend). **Trendlines can quickly show us when a trend has ended**. Here, L3 and L5 indicated the trendline changes based on the previous two months' data. Using those trendlines, we can clearly identify when a trend has ended.

Case 5

For short-term swing trading, we normally use daily charts. Here is an example for cotton #2 futures (symbol – CT, ICE exchange) of one year, from 2008 to 2009. The short-term trend covers the previous 2 to 3 weeks or more.

Summary: Here we will use a daily chart to analyze short-term trends in cotton futures. We will pinpoint when the uptrends and downtrends started and ended for the year from 6/10/2008 to 6/10/2009. Zones 1 and 2 are enlarged to show the details.

FIGURE 6.16 Crude oil futures weekly chart with trendlines from 6/10/2006 to 6/10/2009 (three years). This example shows how to draw trendlines.

Here is a trend analysis for cotton futures; see Figure 6.17. This is the cotton futures daily chart from 6/10/2008 to 6/10/2009 (one year). The short-term trend is a trend of the previous two to three weeks. We will zoom in on Zone 1 and Zone 2 with more detailed charts below. How would you analyze this chart? Can you mark the specific points at which the uptrend or downtrend started?

- Figure 6.18 **Zone 1**—July to September 2008, cotton futures. This was a "1-2-3-4" type of downtrend that started in early August 2008. As soon as the price was breaking the low level of point 2, the downtrend started. We saw a lower highs (point 3 vs. point 1) and a lower lows (point 4 vs. point 2).
- Figure 6.19 **Zone 2**—February to March 2009, cotton futures. This was a "1-2-3-4" type of uptrend that started in March 2009. As soon as the price broke the high of point 2, the uptrend started. We saw higher lows (e.g., point 3 vs. point 1) and higher highs (e.g., point 4 vs. point 2).

For overall trend analysis for the cotton futures, see Figure 6.20. Here again is the daily chart from 6/10/2008 to 6/10/2009 (one year). How would you analyze this chart? Pay attention to when each trend started. **(1) In July 2008**, a downtrend started in

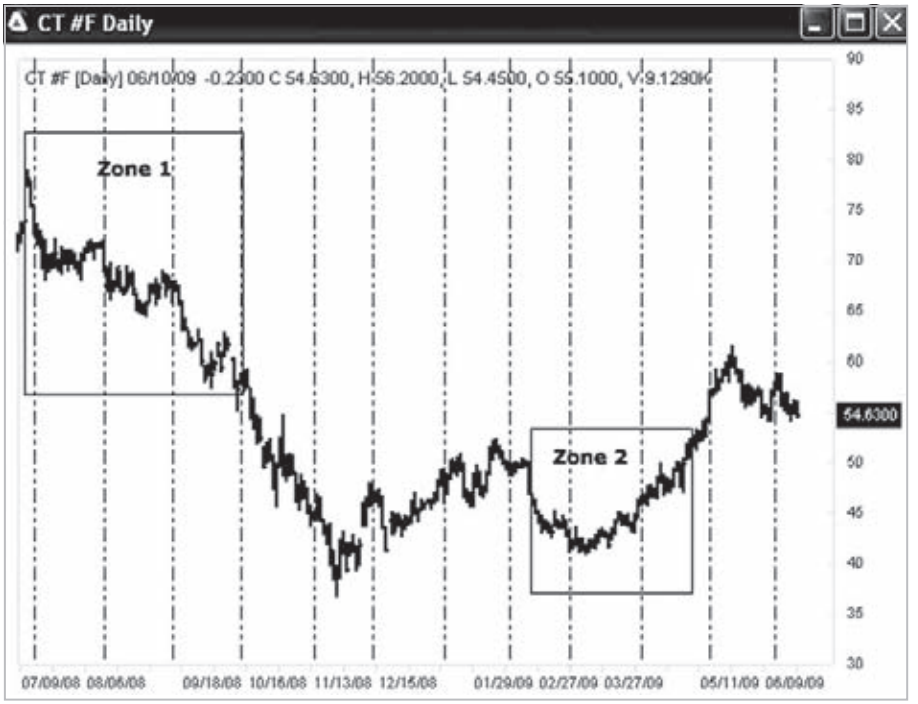


FIGURE 6.17 Cotton futures daily chart from 6/10/2008 to 6/10/2009 (one year). Can you mark the specific points at which the uptrend or downtrend started?

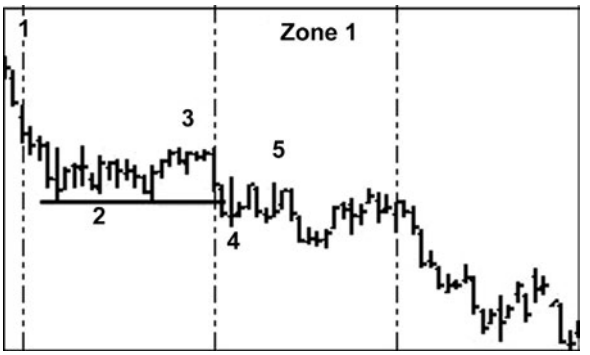


FIGURE 6.18 Zone 1—July to September 2008, cotton futures.

1-2-3-4 fashion. As soon as the breakout of the low at level 2, the downtrend started. **(2) In November 2008**, when prices broke the high at level 2, we saw a "1-2-3-4" fashion start of the downtrend. **(3) In February 2009**, a downtrend started in "1-2-3-4" fashion. As soon as the breakout of the low at level 2 occurred, the downtrend started. **(4) In March 2009**, there was a "1-2-3-4" type of an uptrend. As soon as the price broke the high level of point 2, the uptrend started. We saw higher lows and higher highs.

FIGURE 6.19 Zone 2—February to March 2009, cotton futures.

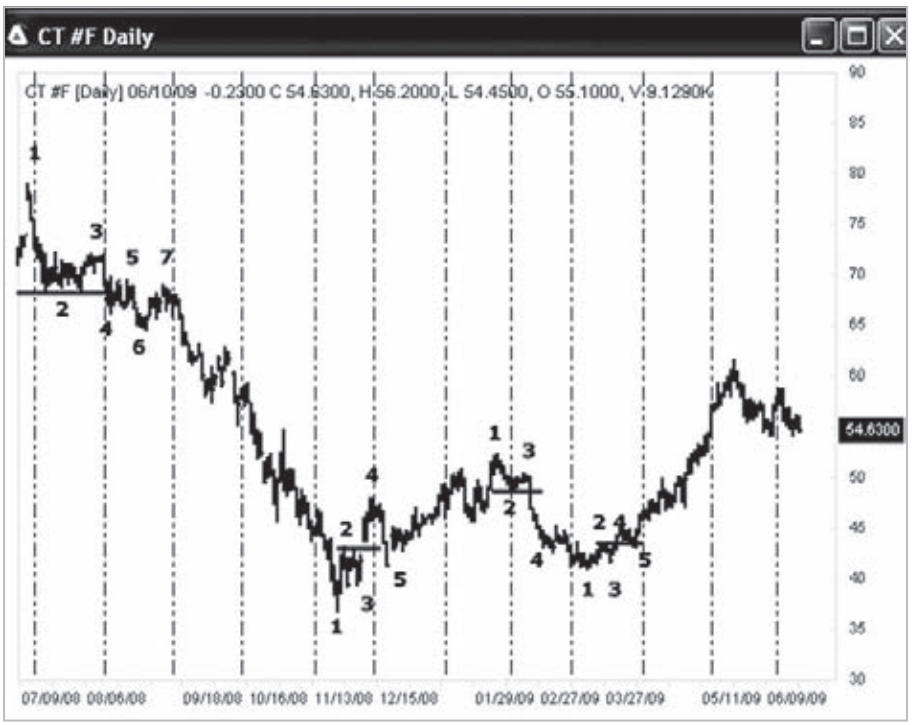


FIGURE 6.20 Trend analysis for cotton futures daily chart from 6/10/2008 to 6/10/2009 (one year).

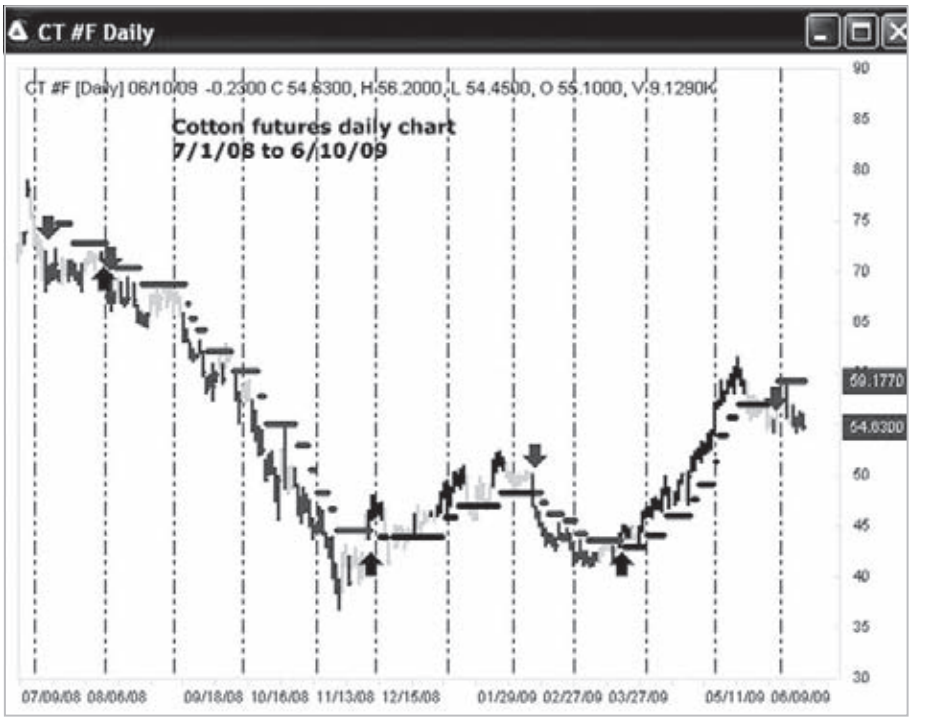


FIGURE 6.21 Cotton futures daily chart with AbleTrend1 and AbleTrend2 indicators applied. Up-arrows were buy signals of the T1, and down-arrows were sell signals of the T1. The small dots are protection stops of the T2.

Finally, Figure 6.21 is the cotton futures daily chart with AbleTrend1 and AbleTrend2 indicators applied. Up-arrows were buy signals of the T1, and down-arrows were sell signals of the T1. The small dots are protection stops of the T2. Sell signal was on 8/4/2008, buy signal 11/26/2008, sell signal on 2/10/2009, and buy signal on 3/20/2009. AbleTrend did catch the big moves over the one year.

Case 6

Now we will look at an example of the gold futures 15-minute chart for short-term swing trading, on 7/6/2009. When the U.S. government keeps issuing T-Bonds, people become really concerned about inflation in the future since the U.S. debt is reaching $10 trillion today. Gold cash and futures become very popular markets to trade. In the past, there was a price ratio of 15:1 for gold to crude oil. These days the ratio doesn't work any more. This has made it very hard to trade gold futures over the past 2 or 3 years. Let's see how our trend analysis and AbleTrend may help.

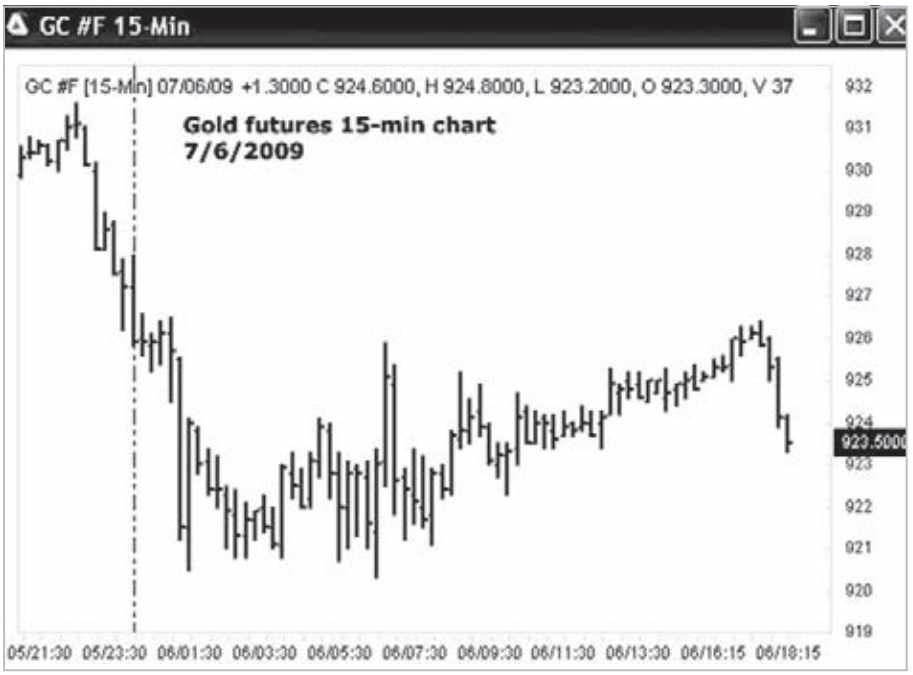


FIGURE 6.22 Gold futures 15-minute chart of 7/6/2009. Here, the label 06/01:30 means date 7/6/2009, time 1:30 A.M. (PST).

Summary: Using a 15-minute chart to analyze trends of gold futures, we will pinpoint when the downtrends ended, and when the uptrend started. Also, we will analyze a triangle consolidation and its breakout, and discuss how to handle the sideways market ahead.

Figure 6.22 is an example of the gold futures 15-minute chart of 7/6/2009. When did the downtrend end? When did the uptrend start? And, when did prices break out of the triangle consolidation?

Figure 6.23 shows the gold futures 15-minute chart of 7/6/2009 with some points marked. When the price broke out of the previous high at point "H," it indicated that the downtrend had ended from the breaking point. With this concept, our mind will be very alerted to the change of market directions.

Figures 6.24 to 6.26 show how to analyze a market from trending to choppy. First, Figure 6.24 is the gold futures 15-minute chart with additional critical points marked. The market formed a low at point 1, then a high at point 2. As soon as it broke out of the previous high at H1, and formed the low at point 3 and the high at point 4, the uptrend in the 15-minute chart started.

Figure 6.25 once more is the gold futures 15-minute chart. As we can see, after point 4 *we saw higher lows, but lower highs*, which meant that rather than entering an uptrend,

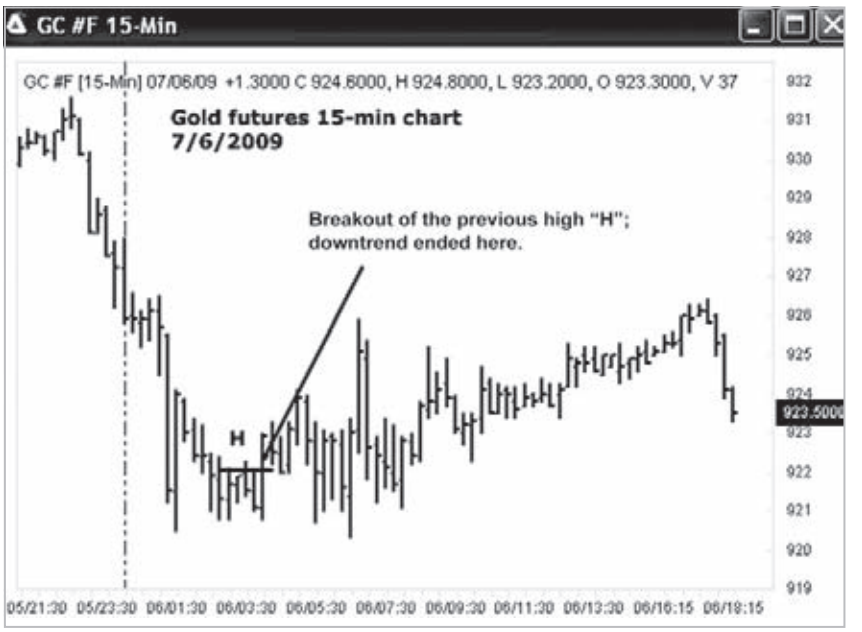


FIGURE 6.23 Gold futures 15-minute chart of 7/6/2009 with some points marked. When the price broke out of the previous high at point "H," it indicated that the downtrend had ended from the breaking point.

FIGURE 6.24 Gold futures 15-minute chart of 7/6/2009 with additional critical points marked. The market formed a low at point 1, then a high at point 2. As soon as it broke out of the previous high at H1, and formed the low at point 3 and the high at point 4, the uptrend in the 15-minute chart started.

FIGURE 6.25 Gold futures 15-minute chart of 7/6/2009. As we can see, after point 4 we saw higher lows, but lower highs, which meant that rather than entering an uptrend, prices were forming a consolidation triangle.

FIGURE 6.26 Gold futures 30-minute chart of 7/6/2009 to 7/8/2009. As we can see, the market was up and down—very choppy.

prices were forming a consolidation triangle. Remember in Chapter 2, we talked about the seven confirmation rules for a trend. This triangle conflicts with the "higher lows and higher highs" confirmation of an uptrend. At the end of the triangle on the gold chart, the market broke out to the upside, and then soon broke down again. This kind of price action suggests a sideways market is ahead. It appears that a 15-minute interval chart might be too short to handle the market's volatility, and it might be advisable to stop trading for a while. See the next chart (a 30-minute chart) in Figure 6.26.

With a larger scale (Figure 6.26), here's the gold futures 30-minute chart of 7/6/2009 to 7/8/2009. As we can see, the market was up and down—very choppy—making it very hard to trade with the trend-following method. Near the end of the day, prices broke the support level of the previous two days, and a downtrend formed. We drew two lines on the chart for support and resistance lines. We should wait for prices to break out to resume trading.

In Figure 6.27 we go back to the gold futures 15-minute chart of 7/6/2009, only this time we will look at it with buy/sell signals of the AbleTrend1 and AbleTrend2 indicators applied. It seems that AbleTrend did a good job clarifying the direction of the trend for such choppy market conditions.

FIGURE 6.27 Gold futures 15-minute chart of 7/6/2009, with buy/sell signals of the AbleTrend1 and AbleTrend2 indicators applied. It seems that AbleTrend did a good job clarifying the direction of the trend for such choppy market conditions.

THE E-MINIS

E-mini index futures are the most electronically traded futures markets in the United States. There are E-mini S&P 500, E-mini NASDAQ 100, E-mini Dow, E-mini Russell 2000 contracts, and many more. They are traded 24 hours through GLOBEX, CME, ECBOT, and ICE exchanges. Among those, the most popular is the E-mini S&P 500 futures (symbol root ES). Three examples of trend analysis along with AbleTrend are presented here. They are E-mini S&P 500 daily chart and 5-minute chart, and the E-mini Dow 3-minute chart. We first use trend definition to pinpoint the trend starting and ending points on each chart, and then compare and view the analysis by AbleTrend.

Case 7

Index futures is one of the most traded futures. The trading volume has been increasing many times in the past few years. Let's review one of the most heavily traded E-mini futures markets, and one of the most widely electronically traded futures markets – the E-mini S&P 500 index futures (symbol root ES). The ES is the electronic trading futures contract for the S&P 500 Index. The following charts show the daily chart of ES futures from the year 2007 to 2009 (two years).

Summary: We will use the daily chart to analyze the ES mid-term trend. We will pinpoint when the downtrend and uptrend started. We will also see the trading signals that resulted from the application of the AbleTrend indicators.

This is a mid-term trend analysis. Figure 6.28 is the E-mini S&P 500 index futures daily chart from 5/19/2007 to 5/19/2009 (two years). This chart shows three zones of interest. We will zoom in and give a detailed analysis of each. How would you analyze this chart? Can you mark the specific points at which the uptrend or downtrend started?

Figures 6.29 to 6.34 present typical trend analysis for a daily chart. Figure 6.29 is Zone 1, 08/2007 to 02/2008. In October 2007, when the market broke down below the previous low of the market, the uptrend stopped.

When did the downtrend start? Figure 6.30 shows Zone 1, 08/2007 to 02/2008. Here we see a 1-2-3-type start of the downtrend. In November 2007, when the market's high formed at point 3, we saw a lower low first, followed by a lower high, indicating the downtrend had started.

Figure 6.31, Zone 1, is a continuation of Figure 6.29. This chart shows that there was a downtrend in October 2007. The market had a pullback, followed by a breakout of the previous high at point A, which is when the downtrend stopped. A few bars away from point 1, prices broke out below the low at point B, and stopped the short-lived uptrend. Then we see a "1-2-3-4" fashion downtrend, with lower highs and lower lows, indicating that a downtrend had started again in early January 2008.

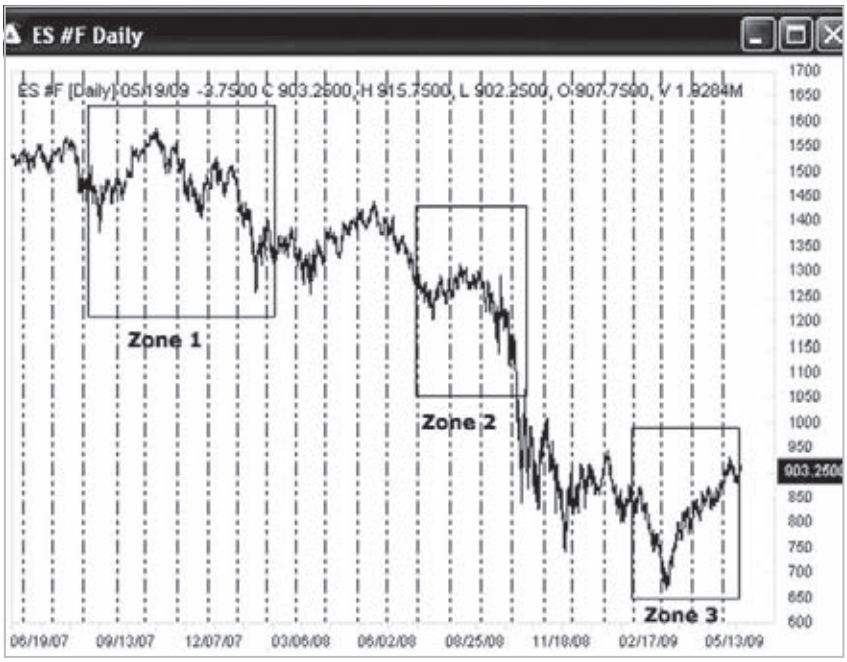


FIGURE 6.28 E-mini S&P 500 futures daily chart from 5/19/2007 to 5/19/2009 (two years). This chart shows three zones of interest. We will zoom in and give a detailed analysis of each. How would you analyze this chart? Can you mark the specific points at which the uptrend or downtrend started?

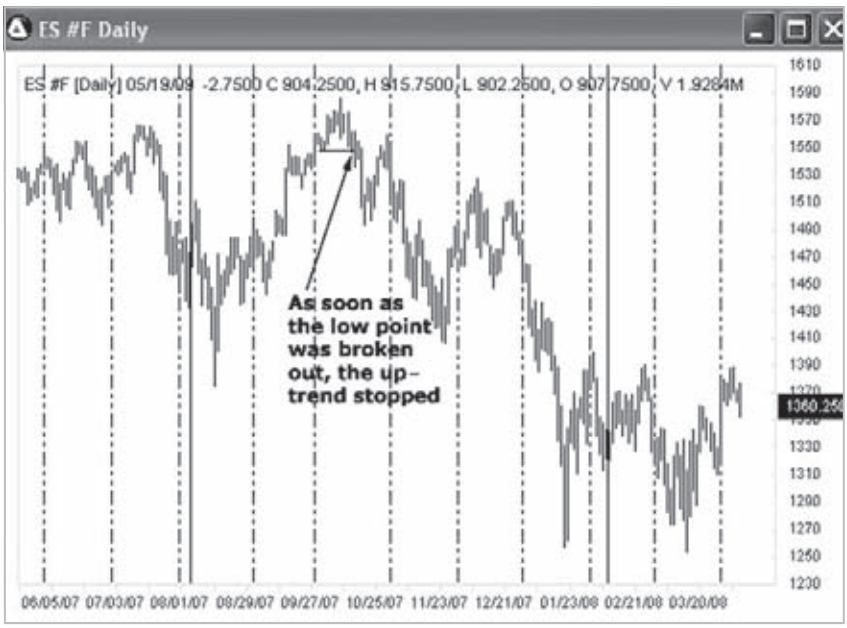


FIGURE 6.29 Zone 1, 08/2007 to 02/2008. In October 2007, when the market broke down below the previous low marked above, the uptrend stopped.

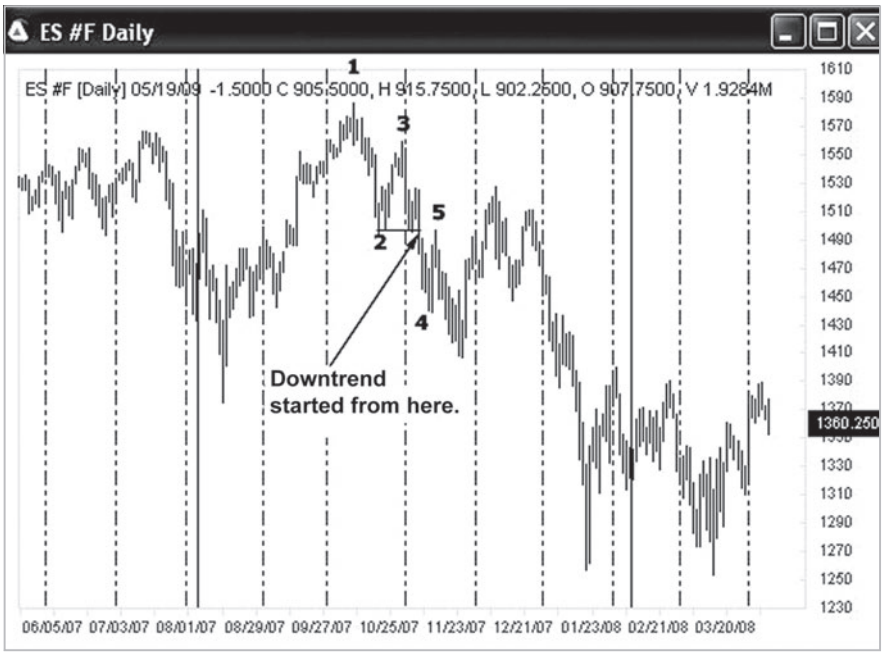


FIGURE 6.30 Zone 1, 08/2007 to 02/2008. Here we see a 1-2-3-type start of the downtrend. In November 2007, when the market's high formed at point 3, we saw a lower low first, followed by a lower high, indicating the downtrend had started.

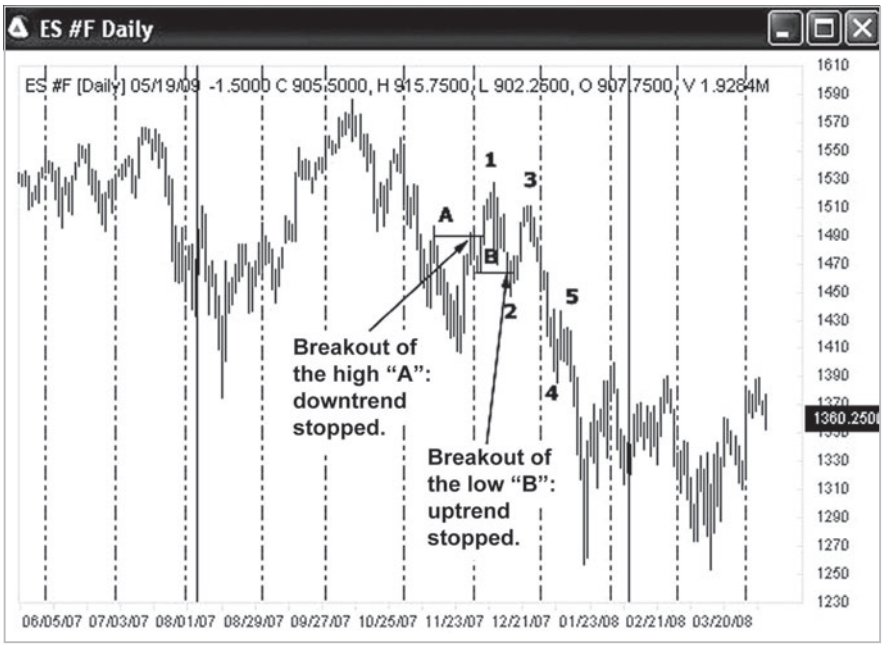


FIGURE 6.31 Zone 1, Continuation of Figure 6.29. We see a 1-2-3-4, with lower highs and lower lows, indicating that a downtrend had started again in early January 2008.

Figure 6.32 is **Zone 2,** 07/2008 to 09/2008. We saw a lower high (point 3 vs. point 1), then a lower low (point 4 vs. point 2). This was a typical "1-2-3-4" type startup to a downtrend. When the market broke out below the low at point 2 in early September, 2008, this indicated that the downtrend had started. In fact the financial crisis of 2008 started at this time.

Figure 6.33 is **Zone 3,** early 2009. In March 2009, the market quickly reversed and broke out above the previous high at point H, indicating that the previous downtrend had stopped. As soon as the low at point 3 formed, we saw a higher high first, and then the higher low, indicating that the uptrend had started in "1-2-3" fashion in March 2009. After point 3, there were well-defined higher highs and higher lows that confirmed the continuation of the uptrend.

Figure 6.34 shows **Zone 3,** early 2009, with AbleTrend1 and AbleTrend2 indicators added, and buy/sell/stop signals are displayed.

Figure 6.35 is the E-mini S&P 500 futures daily chart from 5/19/2007 to 5/19/2009 with AbleTrend1 and AbleTrend2 indicators added to the chart. Buy/sell/stop signals are displayed. The S&P 500 index dropped from the top about 1550 to near 650 during the time period, a 58 percent drop in value. Without having to perform detailed analyses on how each trend started or ended, traders can enjoy a quick solution by using the AbleTrend indicators. Up-arrows are the buy signals, and down-arrows the sell signals. AbleTrend did catch the major moves of the market.

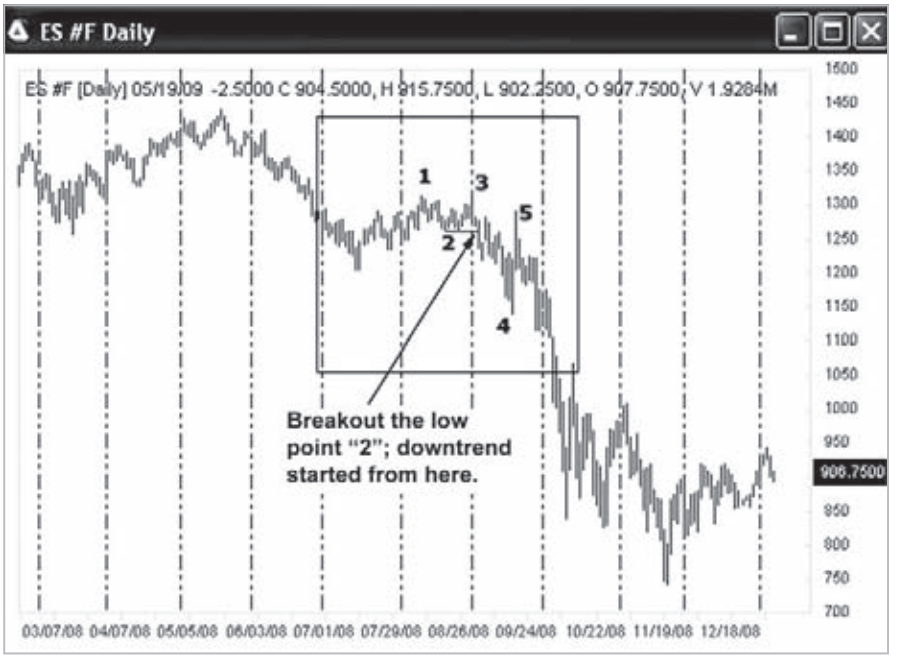


FIGURE 6.32 Zone 2, 07/2008 to 09/2008. When the market broke out below the low at point 2 in early September 2008, this indicated that the downtrend had started.

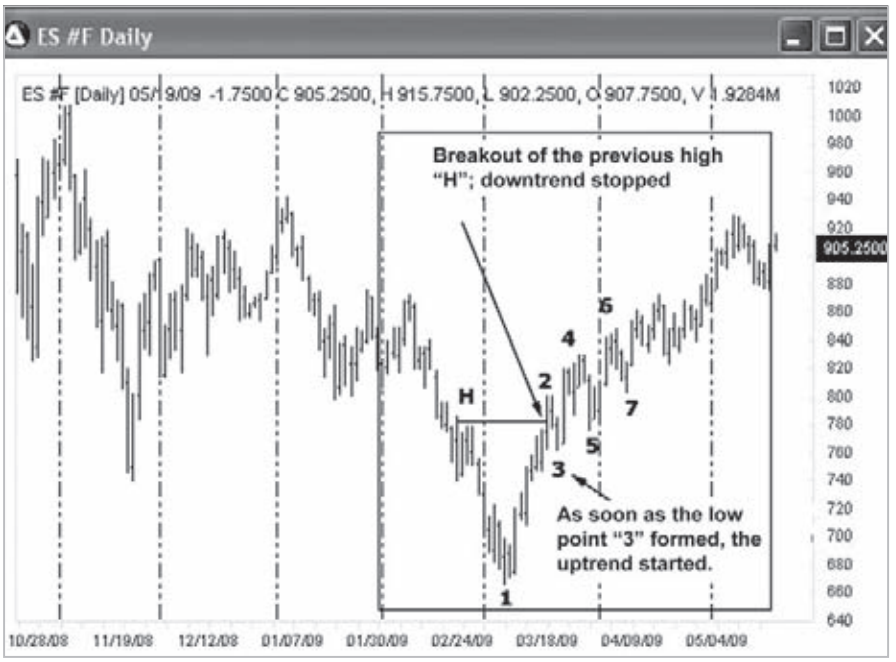


FIGURE 6.33 Zone 3, early 2009. In March 2009, the market quickly reversed and broke out above the previous high at point H, indicating that the uptrend had started in 1-2-3 fashion in March 2009.

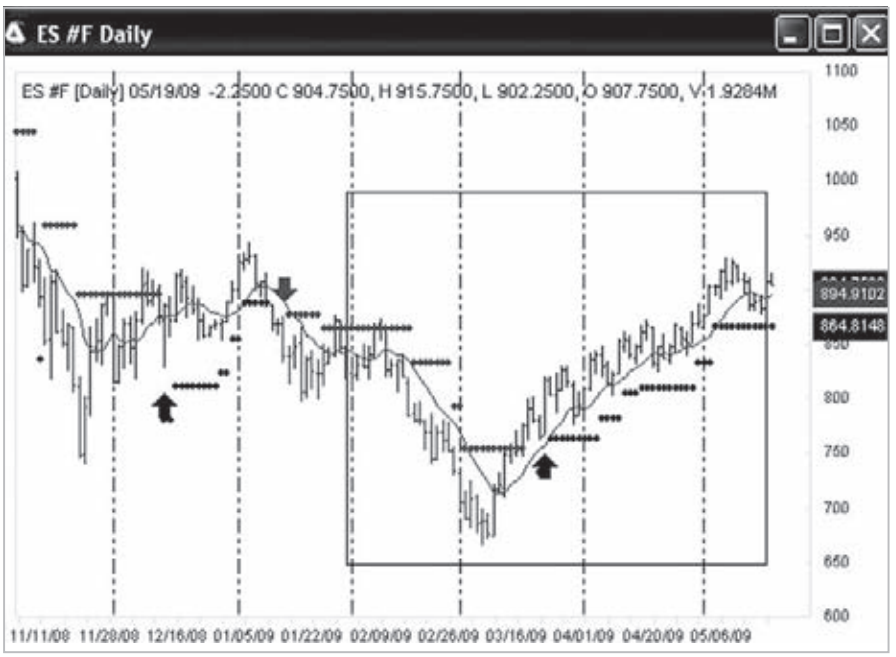


FIGURE 6.34 Zone 3, early 2009. AbleTrend1 and AbleTrend2 indicators are added and buy/sell/stop signals are displayed.

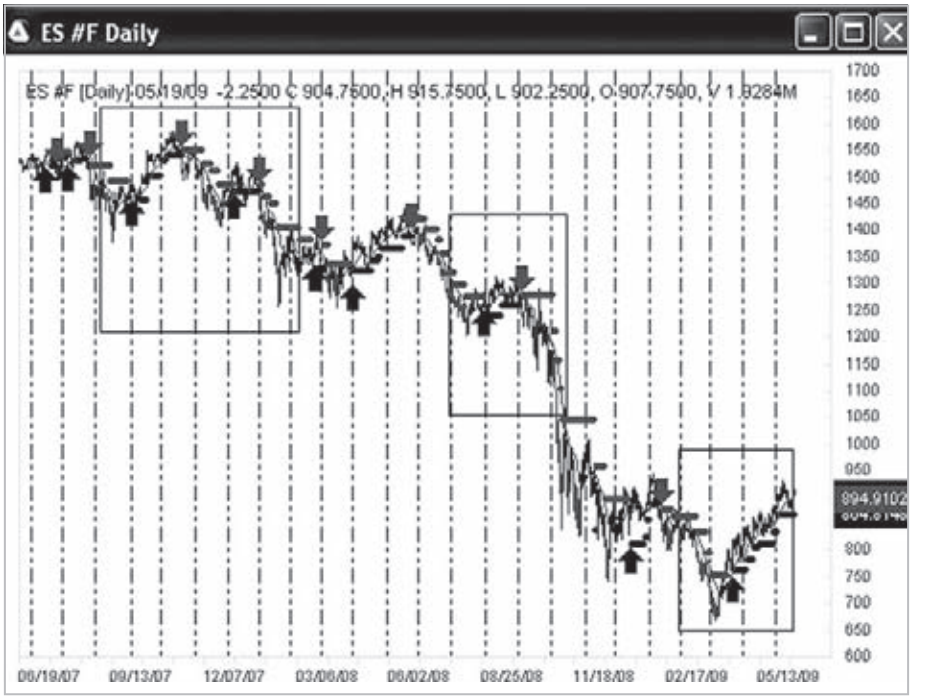


FIGURE 6.35 E-mini S&P 500 futures daily chart, 5/19/2007 to 5/19/2009, with AbleTrend1 and AbleTrend2 indicators added. Buy/sell/stop signals are displayed.

Case 8

Now let's review a 5-minute chart of E-mini S&P 500 futures. The 5-minute chart is commonly used for day trading. Pay attention to how this uptrend started. Typically, for day trading index futures, 2- to 5-minute charts are commonly used. It is trading very short-term trends.

Summary: We will now use a 5-minute chart of the E-mini S&P 500 futures to demonstrate how to pinpoint when an uptrend starts. We will look at what it means when prices break a few natural resistance levels within a short time. We will also see what is revealed when we add trading signals by applying the AbleTrend indicators.

Figure 6.36 is the E-mini S&P 500 futures 5-minute chart of March 6, 2009. Let's closely look at what happened at 12:20 P.M., when the ES futures price rallied and broke out above the previous highs. This price action told us the previous downtrend had ended. We needed to hold trading for a while, and watch to see whether a new uptrend had been set up or whether the previous downtrend would resume. Can you mark on this chart the spot where the downtrend stopped and the uptrend started?

See Figure 6.37 for our analysis. Now here's the E-mini S&P 500 futures 5-minute chart on March 6, 2009, with further price action marked. After the price broke the previous high, the previous downtrend on the left side stopped. Soon, the low at point 1

FIGURE 6.36 E-mini S&P 500 futures 5-minute chart, March 6, 2009. Here, the label 06/11:01 means date 3/6/2009, time 11:01 A.M.

FIGURE 6.37 E-mini S&P 500 futures 5-minute chart, March 6, 2009. We could clearly spot the 1-2-3 type of uptrend formation from the point we marked on the chart.

FIGURE 6.38 E-mini S&P 500 futures 5-minute chart, March 6, 2009. Pay attention to the quick breakout of previous resistance levels marked as R1, R2, and R3.

formed; we see a double bottom. After the high at point 2 formed, we see a higher high. As soon as the low at point 3 formed, we could clearly spot the "1-2-3" type of uptrend formation from that point on.

Let's look more carefully at Figure 6.38. Pay attention to the quick breakout of previous resistance levels marked as R1, R2, and R3. Those levels are natural resistance. When you see such fast breaking out, be alerted! This indicates the uptrend forces were very strong. If we see a pullback near R1, R2, or R3, we will buy after prices break through. The result is shown on the right side of the chart.

Take a look at what AbleTrend did for this chart. Figure 6.39 is the same chart of the E-mini S&P 500 futures 5-minute chart on March 6, 2009, but with AbleTrend buy/sell/stop signals added. We saw the price quickly break out of the triangle's down trendline, and at the same time the T2 stops (above the bars) appeared, indicating that the market could not wait. It just wanted to go up! The STM works well for this case. Also all the spots from green bars to blue bars, near the T2 stops places, are so-called sweet spots to buy.

Case 9

Let's now examine day-trading the E-mini Dow futures (symbol root YM) with a 3-minute chart. The YM, which is the E-mini futures contract for the DJIA index, is one of the most

FIGURE 6.39 E-mini S&P 500 futures 5-minute chart, March 6, 2009, with AbleTrend buy/sell/stop signals applied. The market just wanted to go up!

heavily electronically traded futures markets. The following charts show a 3-minute chart of YM futures on July 8, 2009.

Summary: We will use the 3-minute chart to analyze YM over a very short-term trend for day-trading purposes. We will pinpoint when the downtrend and uptrend started. We will also see the trading signals that were given with the application of the AbleTrend indicators.

Let's examine a day-trading example. Figure 6.40 is a 3-minute chart of YM E-mini futures on July 8, 2009. Under normal conditions, we would use 2- to 5-minute charts for day trading E-mini index futures. Here, the label 08/07:00 means date 7/8/2009, time 7 A.M. (PST). How would you analyze this chart? Can you mark the specific points at which the uptrend or downtrend started?

Here is our brief trend analysis. In Figure 6.41, there were four trends: a downtrend on the left side, followed by an uptrend, then another downtrend, followed by an uptrend on the right side. We will perform trend analyses only for the first downtrend on the left side and the last uptrend on the right side. *The first downtrend* started in a "1-2-3" fashion as marked on the chart. At 7:15 A.M., when the market broke the low at L1, the previous uptrend stopped. Around 8 A.M., when the market's high at point 3 formed, we saw a lower low first, followed by a lower high (point 3 vs. point 1), and this is when the downtrend started. *The last uptrend* started around 11:48 A.M. When the market broke

FIGURE 6.40 YM futures 3-minute chart, July 8, 2009. Here, the label 08/07:00 means date 7/8/2009, time 7 A.M. Can you mark the specific points at which the uptrend or downtrend started?

FIGURE 6.41 Four trends: a downtrend on the left side, followed by an uptrend, then another downtrend, followed by an uptrend on the right side. How do you analyze this chart?

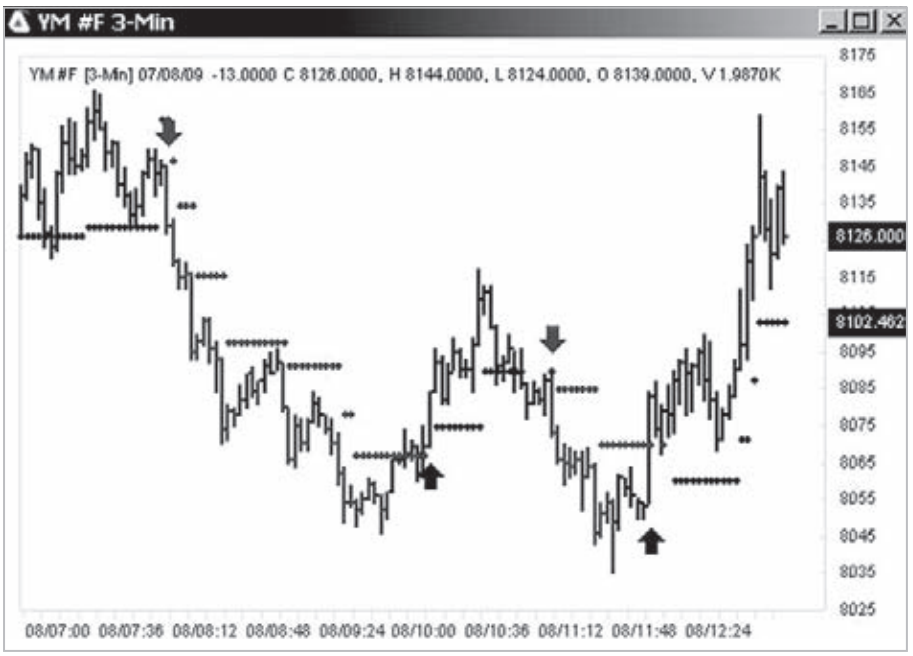


FIGURE 6.42 YM futures 3-minute chart, July 8, 2009, with AbleTrend buy/sell/stop signals applied. Up-arrows are the buy signals, and down-arrows are the sell signals.

the high (H) at point 2, and then formed a low at point 3, the uptrend started. We had a higher low and higher high at the same time. This is a "1-2-3-4" type of uptrend formation.

With AbleTrend buy/sell/stop signals applied, the chart is shown in Figure 6.42. Up-arrows are the buy signals, and down-arrows, the sell signals. AbleTrend clearly catches the major moves of the Dow futures on that day.

FOREX

Forex refers to foreign currency exchanges through inter-banks around the world. There is no specific "exchange" place as there is for stocks or futures. The trading amount of Forex exceeds $3 trillion per day, i.e., 25 times bigger than all stock markets combined around the world. The most popular Forex are exchanges of the U.S. dollar to six foreign currencies: EUR/USD, GBP/USD, AUD/USD, USD/JPY, USD/CHF, and USD/CAD. Forex charts have the best trend among all the markets. Two examples of trend analysis along with AbleTrend are presented here. They are AUD/USD daily chart and 30-minute GBP/USD chart. We first use trend definition to pinpoint the trend starting and ending points on each chart, then compare and view the analysis by AbleTrend.

Case 10

Forex is a common term for foreign currency exchanges. It is a 24-hour market through banks around the world. In August 2008, when the financial crisis started in the United States, and the U.S. Federal Reserve kept printing paper money to support its activities. It seemed logical to most analysts that the value of the U.S. dollar would drop. Therefore, it was expected that many traders would buy the Australian dollar, British pound, etc., and that therefore the exchange rate of the Australian dollar with regard to the U.S. dollar would go up. However, the market frequently fools most people and turns them into losers. Let's review position trading for AUD/USD, which was in a big downtrend during the time in question. How would one spot the early entry point and stay on the trend?

Summary: "What is supposed to happen" can be far different from "what is actually happening." Big moves give signs. Looking at the daily chart of AUD/USD, what sign alerts you to pay attention to this 3500 pips ($35,000 per contract) move? We will also look at the trading signals that appeared on the chart with the application of the AbleTrend indicators. In fact, if the market acts against common sense, we always view it as the best time to follow the market.

Figure 6.43 is a daily chart of AUD/USD Forex, 4/22/2008 to 12/2/2008. How would you analyze this chart? Can you mark the specific point at which the big downtrend started? Take a look at Zone 1.

Let's see **Zone 1** in Figure 6.44: Here is the daily chart of AUD/USD Forex, zoomed in on Zone 1, 6/1/2008 to 8/1/2008. First we see a lower high at point 3, as soon as the market

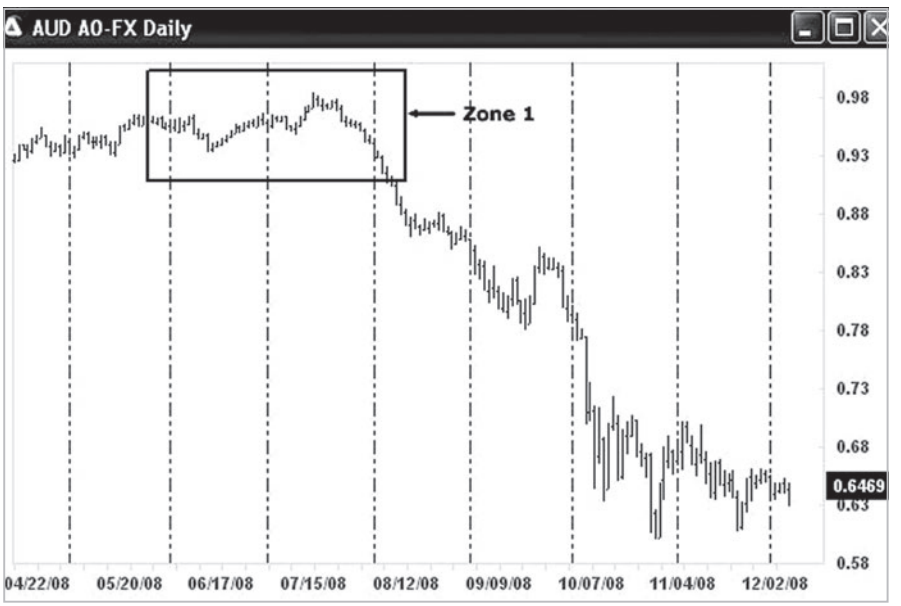


FIGURE 6.43 AUD/USD Forex daily chart, 4/22/2008 to 12/2/2008. How would you analyze this chart? Can you mark the specific point at which the big downtrend started? Take a look at Zone 1.

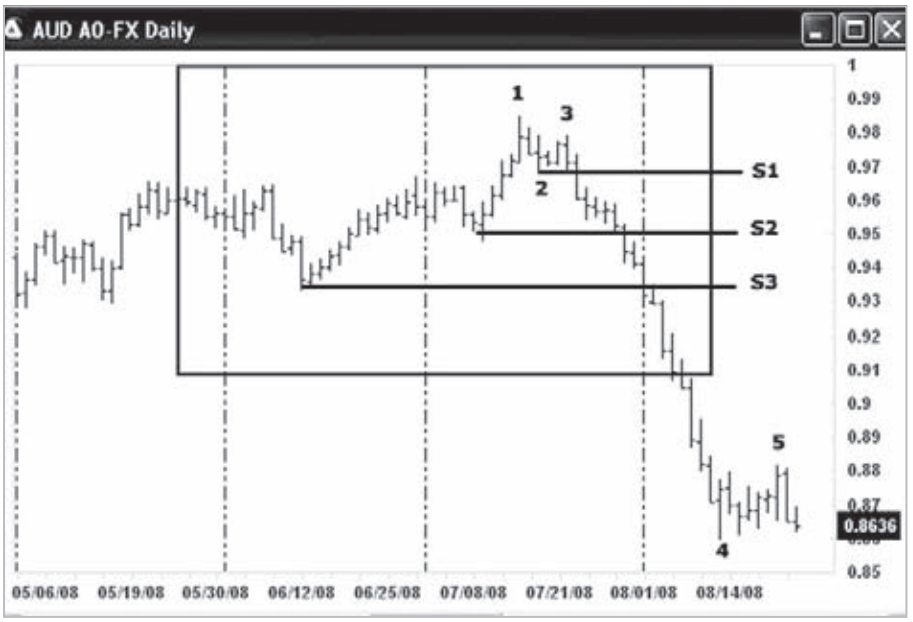


FIGURE 6.44 AUD/USD Forex daily chart, zoomed in on Zone 1, 6/1/2008 to 8/1/2008.

breaks out below the low at point 2 and the support at level S1, we have a lower low. This means that the downtrend started on 7/23/2008. This is a "1-2-3-4" type of downtrend startup. Over the next six days, the market quickly broke below two natural support levels at S2 and S3. By showing such a big downward force within such a short period of time, this price action indicated that a big move might be ahead. When you see the market breaks a few natural support levels in a row, be alerted! The big moves are under way. We should get in the sell position quickly. If you see any pullback, that's the sweet spot to sell or add positions.

Figure 6.45 shows the daily chart of AUD/USD Forex from 5/27/2008 to 10/31/2008, with AbleTrend indicators applied. The T1, T2, and EMA added on the chart show the STM entry and exit points. You may note that on 9/22/2008, the high of that day touched the T2 dot, but the market closed below the T2 dot. A trader might or might not have exited on that day. As we have mentioned, many AbleTrend users only exit when the bar close price penetrates the T2 stop. Traders who exited could have entered again with STM—the T1 and T2 in agreement. For STM rules, refer to Chapter 5.

Case 11

Let's review swing trading GBP/USD with a 30-minute chart. Swing trading typically lasts for a few days to two weeks. Commonly 30-, 60,- or 120-minute charts are used for swing trading. How do we spot the early entry point and stay on the trend? How do we deal with the choppy market condition on the right side of the chart?

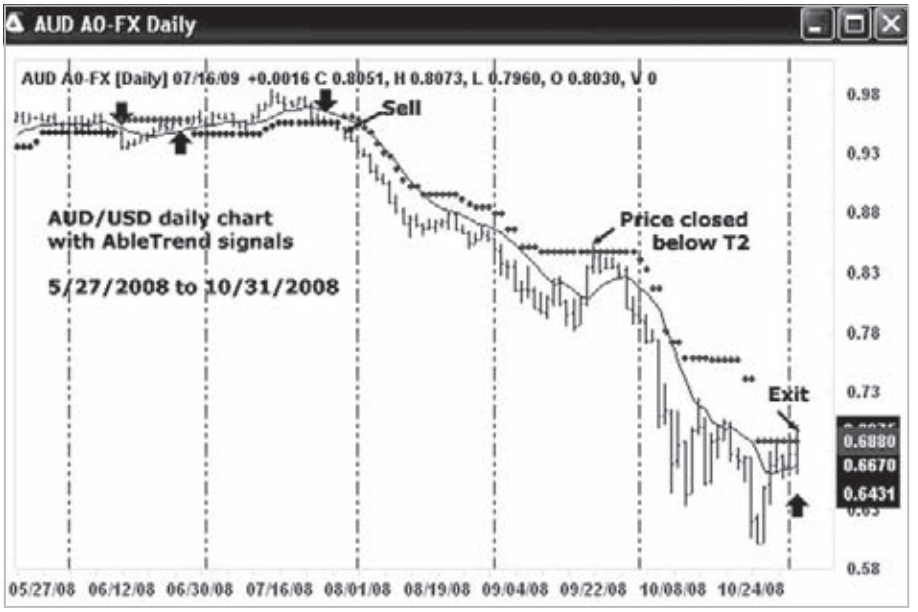


FIGURE 6.45 AUD/USD Forex daily chart, 5/27/2008 to 10/31/2008, with AbleTrend indicators applied.

Summary: Here we will see how the market started an uptrend, then entered a downtrend, then resumed the uptrend within a few days. We will also see the trading signals that appeared with the application of the AbleTrend indicators.

Figure 6.46 is the GBP/USD Forex 30-minute chart (7/8/2009 to 7/16/2009). Can you identify the early entry point? How would you stay on the trend? And how would you deal with the choppy market condition on the right side of the chart?

Let's do a trend analysis for it (see Figure 6.47). It is the GBP/USD Forex 30-minute chart (7/8/2009 to 7/16/2009) with critical points marked. The uptrend on the left side started up in "1-2-3-4" fashion. Then we saw a "1-2-3-4" type startup to a downtrend. This was followed by a quick "1-2-3" startup to an uptrend. Finally, prices exhibited the choppy market condition we see on the right side of the chart, and that we have highlighted in the Zone 1 box. In the next chart (Figure 6.48); we will examine more details for Zone 1.)

In Figure 6.48, we have zoomed in here on Zone 1. Looking at this choppy market, we see that prices broke below the trendline L1, but quickly rebounded from trendline L2, and then retracted from resistance R. All of these actions indicated that there was a choppy market ahead. Sometimes, staying away from such sideways markets is the best choice.

Let's see what AbleTrend trading signals are for the preceding chart. Figure 6.49 is the GBP/USD Forex 30-minute chart with AbleTrend buy/sell/stop signals applied (7/8/2009 to 7/16/2009). Up-arrows are the buy signals, and down-arrows are the sell signals. AbleTrend works well for trending markets such as the Forex markets.

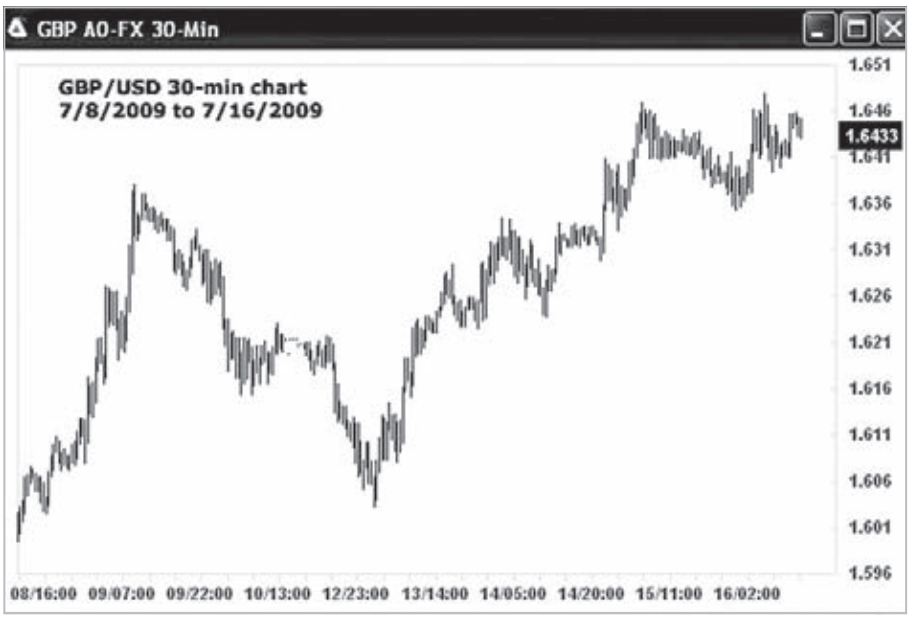


FIGURE 6.46 GBP/USD Forex 30-minute chart (7/8/2009 to 7/16/2009). Can you identify the early entry point? Here, the label 08/16:00 means date 7/8/2009, time 16:00.

FIGURE 6.47 GBP/USD Forex 30-Minute Chart (7/8/2009 to 7/16/2009) with Critical Points Marked.

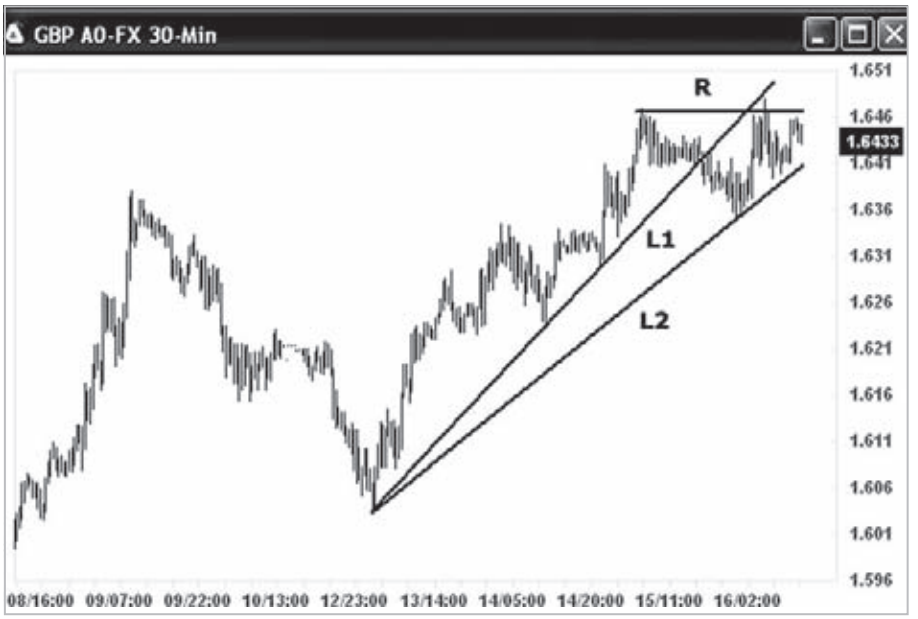


FIGURE 6.48 GBP/USD Forex 30-minute chart, zoomed in on Zone 1. Looking at this choppy market, we see that prices broke below the trendline L1, but quickly rebounded from trendline L2, and then retracted from resistance R. All of these actions indicated that there was a choppy market ahead. Sometimes, staying away from such markets is the best choice.

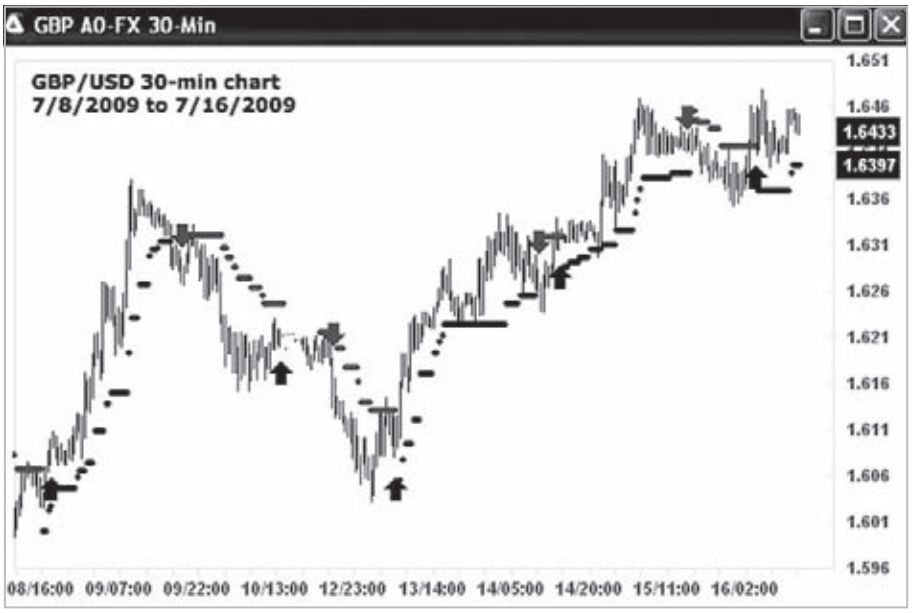


FIGURE 6.49 GBP/USD Forex 30-minute chart with AbleTrend buy/sell/stop signals applied (7/8/2009 to 7/16/2009). Up-arrows are the buy signals, and down-arrows are the sell signals.

BONDS

Fixed income is one of the huge markets. The U.S. bonds trading dollar amounts are many times bigger than the U.S. stock markets. T-Bonds and T-Notes futures are some of the best tradable or trending markets. One time, a client called and told me that by following the AbleTrend buy and sell signals, he had over 10 consecutive winning trades by trading the 10-year notes in one and a half years. See the following two cases—U.S. T-Bonds futures daily chart and U.S. 10-year Notes futures daily chart. Let's make some trend analysis for the T-Bonds and Notes.

Case 12

Now we will review position trading for U.S. T-Bonds futures. Position trading normally lasts for two or three months. How do we spot the early entry points and stay on the trends?

Summary: This example shows that sometimes trading the markets is like dancing with a monster. However, AbleTrend can put the trader in harmony with the market. This will become apparent when we look at the same chart with the AbleTrend indicators for the U.S. T-Bonds futures applied.

Figure 6.50 is the U.S. T-Bonds futures (US) daily chart (3/14/2008 to 7/17/2009). How would you analyze this chart and trade this market? Can you mark the specific points at

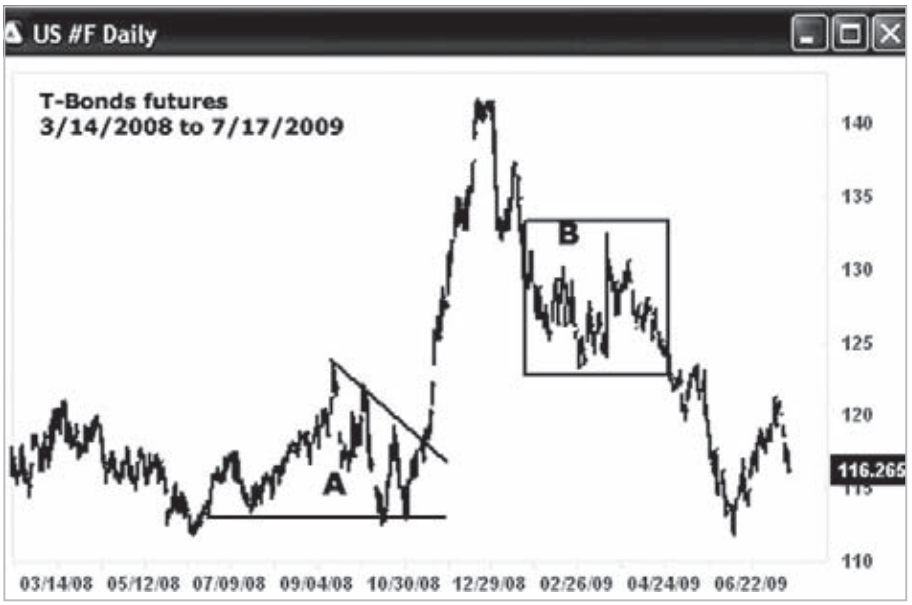


FIGURE 6.50 U.S. T-Bonds Futures (US) daily chart (3/14/2008 to 7/17/2009). How would you analyze this chart and trade this market? Can you mark the specific points at which the uptrend or downtrend started? Pay attention to Zones A and B.

FIGURE 6.51 U.S. T-Bonds Futures (US) daily chart, Zone A. If you bought from the breakout, your initial stop would be placed below the down trendline at about 117.

which the uptrend or downtrend started? In the following two figures, we zoom in on Zones A and B.

Figure 6.51 Zone A: This is the U.S. T-Bonds futures (US) daily chart, zooming in on Zone A, which we marked in Figure 6.50. Here, we see a "1-2-3-4" type startup to an uptrend. As soon as the two-month down trendline and the high level H2 were broken earlier, we would know that the uptrend had started. If you bought from the breakout, your initial stop would be placed below the down trendline at about 117.

How was AbleTrend doing? See Figure 6.52 Zone A: Here is the same U.S. T-Bonds futures (US) daily chart zooming in on Zone A from Figure 6.50, this time with the AbleTrend buy/sell/stop signals applied. The AbleTrend buy signal was given at the breakout of the down trendline. The STM buy signal was shown two bars later.

Let's examine Figure 6.53 Zone B: This is the U.S. T-Bonds futures (US) daily chart, zooming in on Zone B from Figure 6.50. Here we see a "1-2-3-4" type startup to a downtrend. As soon as you saw prices breaking below the low at point 2, you would have known the downtrend had started. Look at point 5, which is a typical *Golden Region of Entry* (sweet spot) for the short position. Refer back to Figure 6.50 for the result.

Case 13

Now, for our last example, let's review position trading for 10-year notes (TY) futures. How do we spot the early entry point and stay on the trend?

FIGURE 6.52 U.S. T-Bonds Futures (US) daily chart, zoomed in on Zone A from Figure 6.50. This time the AbleTrend buy/sell/stop signals have been applied.

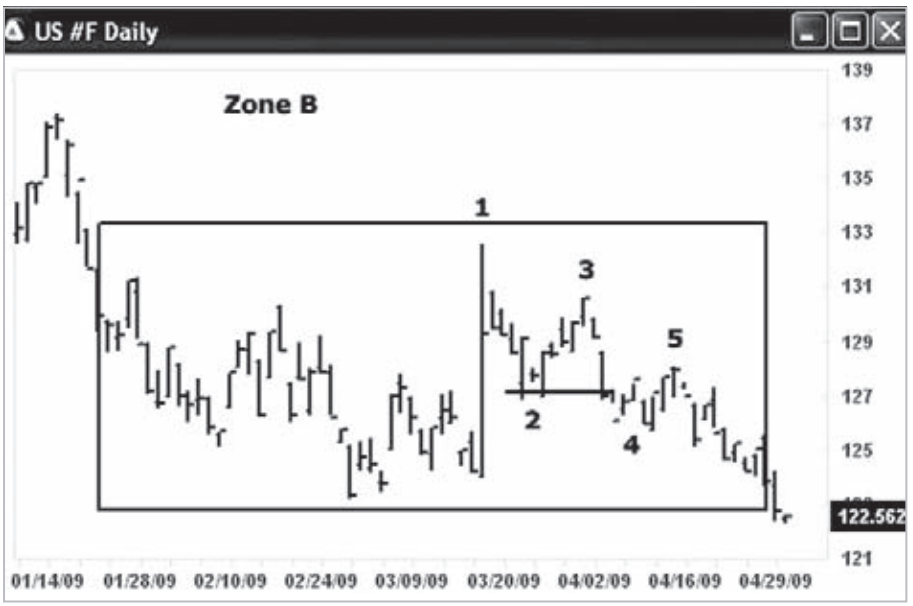


FIGURE 6.53 U.S. T-Bonds Futures (US) daily chart, zoomed in on Zone B. Pay attention to the "Golden Region of Entry" (sweet spot) near point 5 for the short position.

Summary: This example shows how a key turning point forms. With our trend definition, we can spot the specific point when a trend starts. Always pay attention to the major "waves" or turning points. We will also see the trading signals the AbleTrend indicators placed on the chart for the TY market.

This is an example of position trading. Figure 6.54 shows the 10-year notes futures (TY) daily chart (8/3/2006 to 4/4/2008). How would you analyze this chart? Can you mark the specific points at which the uptrend or downtrend started? How would you trade this market? We will examine Zone A, and show the buy/sell/stop signals of AbleTrend in Figure 6.55 and 6.56.

Let's zoom in on Zone A; see Figure 6.55: This is a 10-year notes futures (TY) daily chart. It shows that the uptrend had a "1-2-3-4" fashion start-up. As soon prices broke above the high at point 2, the uptrend began. In fact, after point 5, we had a "Golden Region of Entry" (sweet spot) for a long position.

Figure 6.56 again is the 10-year notes futures (TY) daily chart (8/3/2006 to 5/5/2008). By adding AbleTrend indicators with default settings, we can get in harmony with the market. This chart shows the AbleTrend buy/sell/stop signals over a period of 21 months. Up-arrows are the buy signals, and down-arrows are the sell signals. You might have over 10 consecutive winning trades. T-Bonds and T-Notes markets are very good trending markets, and AbleTrend works well with such markets.

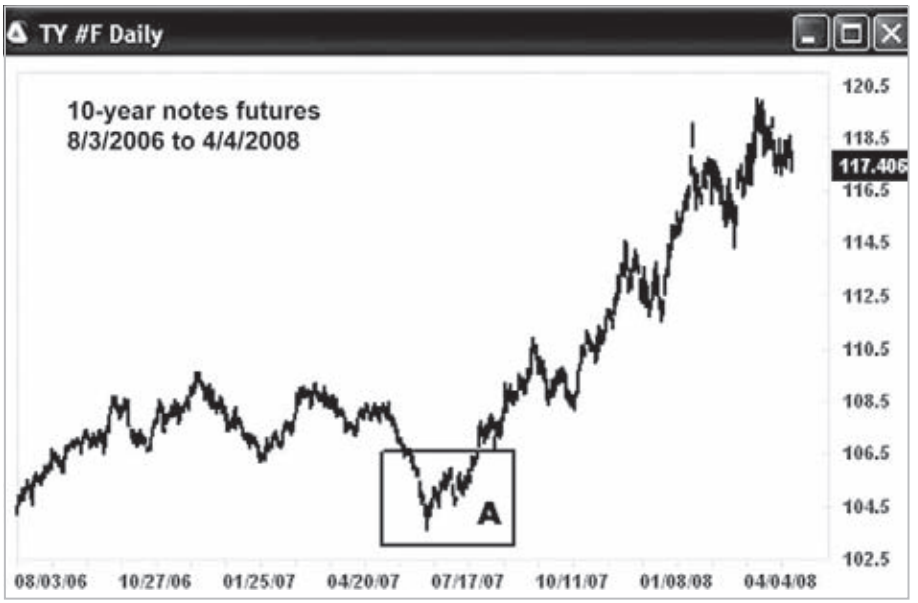


FIGURE 6.54 10-year notes futures (TY) daily chart (8/3/2006 to 4/4/2008). How would you analyze this chart? Can you mark the specific points at which the uptrend or downtrend started?

FIGURE 6.55 10-year notes futures (TY) daily chart, zoomed in on Zone A. The chart shows that the uptrend had a 1-2-3-4 type startup. As soon as prices broke above the high at point 2, the uptrend began. In fact, after point 5, we had a "Golden Region of Entry" (sweet spot) for a long position.

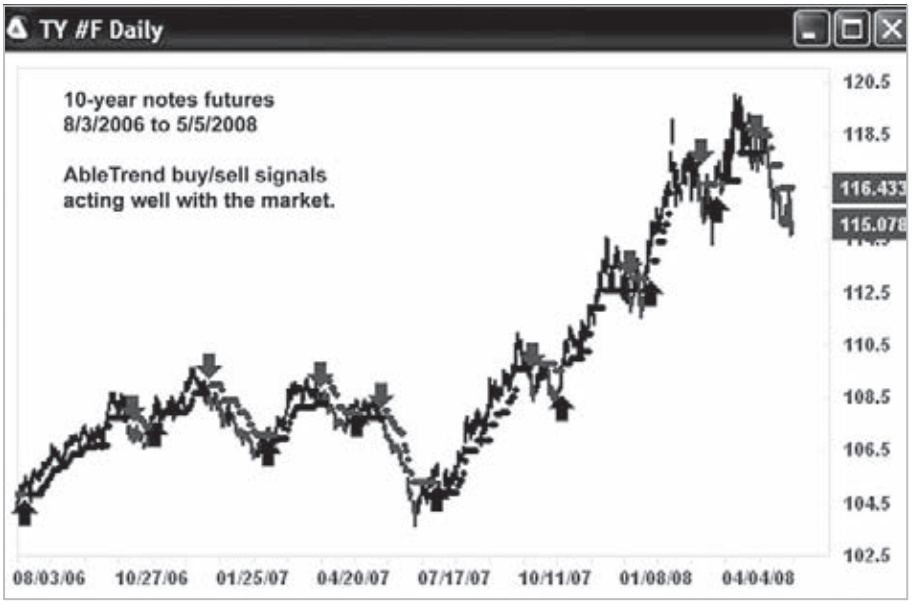


FIGURE 6.56 10-year notes futures (TY) daily chart (8/3/2006 to 4/4/2008) with AbleTrend indicators applied. By adding AbleTrend indicators with default settings, we can get in harmony with the market. You might have over 10 consecutive winning trades with the AbleTrend.

CONCLUSION

Back in Chapter 2 we learned how to define a trend and how to recognize when a trend has started or ended. This chapter has used many examples of market case studies to show the application of these powerful concepts.

As we have seen throughout these examples, whether you do or do not have AbleTrend software, you can use the price action alone to identify the trend in its early stage. It is a question of knowing how to understand the straightforward language that the market directly tells us. There is no delay in comprehending these signals; it is easy and simple if you know how to observe the charts. Don't be fooled by the many complicated trading software programs or signals that are available. Learn the market's own language, and you will have the power to identify, analyze, and trade the market trend.

Of course, AbleTrend offers extra help because it is developed from the same concepts, but it does all the translating for you, and presents its results with an easy-to-recognize visual display. With AbleTrend, it is possible to very quickly and accurately analyze multiple markets.

CHAPTER 7

Advanced AbleTrend Tools

Truth is great. Heaven is great. Earth is great. And, the king is also great. These are the four greats in the universe, and the king is one of them. The king must follow the ways of the earth. The earth must follow the ways of the heaven. The heaven must follow the ways of the Truth. And, the Truth must follow the ways of nature.

—*Tao* by Lao-tzu

This chapter introduces some of the special trading tools that have been incorporated into the AbleTrend software. We will look at the rationale for including them in the system, and how they can be applied for the most benefit. While you may not need all of them, you should understand what each can do for you. We have been developing and designing trading software since 1992, and these tools are the result of our many years of experience in trading and in the trading software industry. We believe that these tools, many of which are the direct outgrowth of the philosophy of trading we have been explaining throughout this book, give traders a tremendous advantage in profiting from any of the world's markets they choose to trade.

VIRTUAL PAPER TRADING (VPT)

Virtual paper trading (VPT) is an ideal way to test trading strategies without risking any real money. The AbleTrend software provides for two types of VPT that give traders great power and flexibility for testing strategies they may be considering using: (1) virtual paper trading with historical data and (2) virtual paper trading with real-time data.

To initiate either paper trading program on AbleTrend, users only need to bring up the appropriate dialog box and specify their parameters, and the software takes care of the rest.

Virtual Paper Trading with Historical Data

Traders can validate their trading strategy, beyond the capabilities of back-testing, by using historical data to paper trade. Traders can choose which indicators they want to include in their strategy and they can set the rules they want to use to interpret the indicators. They can even use subjective indicators alone using AbleTrend. VPT gives you such power by providing combinations of testing subjective indicators and a mechanical trading system.

Virtual Paper Trading with Real-Time Data

Traders can experience real-time virtual paper trading to closely simulate real-time trading without risking any money. This can be very effective with subjective indicators, the mechanical trading system, or a combination of both. When you buy with VPT in real time, it uses the "ask" prices. When you sell, it uses the "bid" prices. Therefore, it is very close to the real trading results.

When you practice VPT, treat paper trading like real trading. Weigh your decisions carefully and keep track of your profits and losses as though the trades were actually executed. It is only in this way that you can give the strategies a good test.

On the other hand, *when you are doing real trading, treat it like VPT.* Don't think about money at that time. Focus on whether the trade is right or wrong, and how you are executing it in real time. Don't let your mind be clouded with concerns about money, as these will likely affect your judgment.

Basic Functions of VPT

When using VPT, traders can run their trading with the following commands:

- **Stop**—Stop the bar's coming.
- **Play**—Start to simulate the bar's coming.
- **Speed**—Set up the bar speed, 1 second to 10 seconds per bar.
- **Buy**—Place a buy order by clicking a bar, mark a blue up-arrow.
- **Sell**—Place a sell order by clicking a bar, mark a red down-arrow.
- **Exit**—Place an exit order by clicking a bar, mark a white cross.
- **Re-do**—Re-do the last trade.
- **Re-set**—Reset the VPT again; start over.
- **C/B**—Default is entry at bar close. Click C/B icon; it will switch to Bid/Ask price, or any specific price on the bar (the price you click will be the price for entry or exit).
- **Setting**—Set up ContractSize, CostPerTrade, and PointValue.
- **Report/Exit**—Show the VPT testing report.

HISTORICAL FORWARD TESTING

Back-testing is a traditional way for traders to test their trading strategies with a set of fixed parameters applied to a specific set of sample data. Parameters used in back-testing are normally optimized, predetermined with some knowledge of the sample data, or derived directly from the sample data; therefore, back-testing has the benefit of hindsight and data-fitting built into its very nature. Back-testing is still valuable, of course. If a trading system or strategy couldn't win in the past, how could we expect it to win in the future? People hope that history will be repeated in the future. This is why back-testing of trading systems has become popular in the last two decades.

Historical forward testing (HFT; also called trading simulation), on the other hand, is one *major* step closer to providing results that are like those obtained from real trading.

AbleSys has developed the industry's first trading simulation software – HFT in 2000. At the request of a trader using the system, the software will derive a set of parameters from a set of "sample data," and then will apply those parameters to forward moving "out-of-sample data." The HFT routine allows traders to simulate what they would have done with a real trading account in the past based on the trading system they are testing. The simulation routine will automatically select system parameters for use with the sample data. After that it moves forward in time to test the out-of-sample data with those parameters preselected. Step-by-step, the program will cover the whole data range.

How does the HFT work? Figures 7.1 and 7.2 visually display the basic concept of the HFT. For example, you might use the first 5 years (1992 to 1996) of a 10-year set of sample data to auto select parameters, and then use the preselected parameters to test system performance results for the 6th year (i.e., 1997). This procedure can be repeated again and again as you go through 10 years of historical data. The cumulated

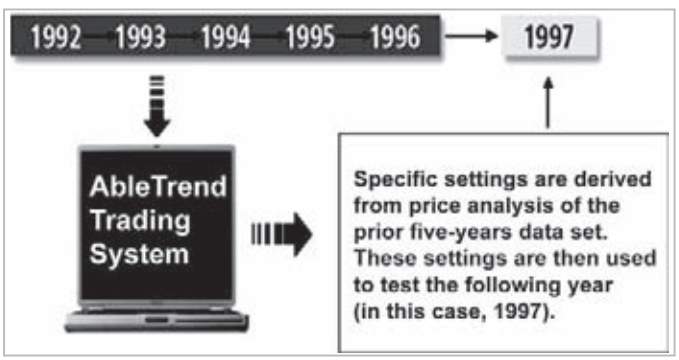


FIGURE 7.1 General methodology used by AbleTrend for HFT. It uses prior five-year historical data (the five-year sample data period 1992 to 1996) to derive the settings (parameters) of a trading system. These settings are then used to test the following year (the forward-testing period, 1997).

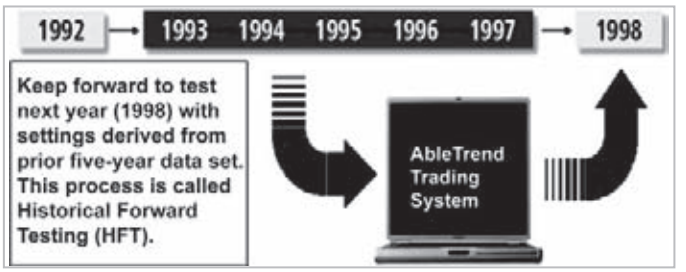


FIGURE 7.2 HFT price analysis procedure. The last five years' worth of price data for each market are analyzed by AbleTrend trading system. From the analysis, system-specific parameter settings are derived for each market. These settings are then used to trade each market for the following year. This procedure of price analysis is then moved forward each year to the present. It is called historical forward testing (HFT). Here, in the example, the five-year sample data period was moved forward one year, 1993 to 1997. The forward-testing period was also moved forward one year, to 1998.

forward-testing results tell us how well the trading system would have performed in the past. The results of HFT are a *simulation of real trading*, not back-testing, and the data it provides is much closer to real trading results.

For daily charts, using 2- to 5-year data to run back-testing, you will get parameter settings from the back-testing. Fix the settings; apply it to the next forward-testing data. The computer program will give the overall forward-testing results, as long as correct parameters are used for a given time period.

Advantages of Historical Forward Testing (HFT)

Basically, historical forward testing solves the problem of validating a trading system. Trying to do so strictly with back-testing can easily give false guidance for the future; however, if a trader must validate a trading system with real money in real-time trading, it can be quite expensive and time consuming. Additionally, only one or two months of testing real-time trading means nothing to the validation of a trading system. It simply isn't enough time for a rigorous test. The HFT software solves this problem, and makes that which was impossible—a rigorous test of a trading system with simulated trading—a reality.

Advantages of HFT are summarized in Table 7.1, when compared with back-testing.

System Efficacy Validating a trading system helps to build system efficacy, which is closely related to system confidence: the positive judgment of a system's capability to perform. System efficacy does not refer to the actual *capability* of the system, but rather the system's ability to convince *you* of its capability. System capability alone is not enough to guarantee its best performance—the system has to demonstrate and convince *the user* that it is capable in order for it to be best utilized in real trading.

There is a big difference in behavior between those who trust in their system and those who have doubts. A trader who trusts in his system will follow it, entering and

TABLE 7.1 Comparisons of Back-Testing and Forward Testing

	Back-Testing	Forward Testing
Validation	Traditional validation	One step closer to actual results
Trading system parameters (inputs)	Fixed parameters	Parameters derived from in-sample set, and move forward with time
Data set	Fixed in-sample data set	Applied to unknown out-sample data set
Benefit (saving time and money)	Benefit of hindsight	Simulates actual trading process—turn years of work to minutes; a money-saving tool
Confidence	Wish it would continue working	More likely working
Simplicity	Simple and easy	Time consuming, or need specially designed software

exiting the market when he is signaled to do so. A trader who has doubts will hesitate until he can't stand to sit on the sidelines anymore. When it comes time to exit, he will doubt the system again and be unwilling to exit until losses are too large to bear. As a result, those who believe in their system will perform better in real trading. It is easy to see why system efficacy is extremely important.

Validation of Trading Strategies HFT is a logical way to validate the ongoing recalibration process as well as system performance. Having the right procedure for recalibrating a system is every bit as important as the quality of the system itself, if not more. HFT is another major step toward scientifically proving a system's results so that traders can build faith in long-term system performance. With faith comes the confidence and discipline required for long-term success.

Turn Years of Work into Minutes Some of our most advanced users have achieved great results by using "manual forward-testing techniques." But the manual testing procedure was very time consuming and tedious. That is why AbleSys has devoted ongoing research and development effort to this issue, and why it is such a benefit to traders that we have now successfully automated this process! Some HFT routines take a 3-GHz CPU computer 60 minutes or more to run. Just imagine how long it would take you to do manual testing with different combinations of sampling data and out-of-sample data, and with different combinations of TSPC/DEV! It would be impractical to even attempt it. But now, thanks to our software developers, it is possible for traders to put this advanced information technology to use and replace their manual testing.

Money Saving Tool How much money do you need to validate a trading system in real-time trading? In addition to the money and time spent researching your system in the markets, you might face huge losses in your trading account if you trade real money during the experimental stage of developing your trading method. Trading

simulation (HFT) offers the advantage of providing *near* real-time results without the expense.

The results are much more valuable than you would get with back-testing. The major difference between back-testing and HFT is that HFT is much closer to reality. People have lost hundreds of thousands of dollars trading without validation of their systems or methods. The trading system is your weapon in war, like a laser-guided missile. If the missile has not been tested or correctly recalibrated, how could you trust it and use it correctly in a war? The military has spent billions and billions of dollars on the testing and recalibration of instruments for their weapons. As a trader, do you have a plan to sharpen the effectiveness of your weapon?

Data Range and Frequency

One of the frequently asked questions for a mechanical trading system is how far the back-testing should go and how frequently we change the system settings. As we explained in Chapter 5, the ratio of back-testing days to forward using days is about 5:1 or 6:1. HFT studies can obtain the best ratio for each individual market. Here are two terms used in HFT.

1. **Sample data period** means sample data range, which represents a set of historical data. For example, if you want to use the past 300 days of data to get optimal input settings for the next 30 trading days, then 300 days is the sample data period.
2. **Forward-testing period** refers to how the system is to be recalibrated. Auto Select parameters are recalibrated every "xx" days, according to the schedule set by the user. This is an "Out-of-Sample Data" set, which represents the future-testing data, compared to the sample data. For example, if you want to use the past 30 trading days of data to recalibrate the system for the next five trading days, then this "xx" would be five.

After the first five days of the forward-testing period, the trading simulation routine will move forward to reset the sample data including the first five days of the forward-testing period. The software will repeat the **recalibration** and **test** procedures step by step to go through the whole data range.

AUTOSCAN

AutoScan is used to help you search for the best candidates in the markets you monitor. It allows you to save lists of symbols, and apply indicators like AbleTrend1, AbleTrend2, EMA, MACD, Volume, etc., to their charts. Figure 7.3 shows an example of AutoScan.

The classical trading method is to set up a chart with a trading system or indicators to monitor the markets. Traders have to wait for buy/sell/stop/exit signals to trade the specific market.

AutoScan is designed to allow another way to trade: You don't wait for the optimal entry or exit points for a specific market. The software automatically scans many markets and alerts you to which ones have the best setup for entry or exit points. AutoScan for intraday real-time charts does an especially good job! For example, you may select 20 or 30 markets with 5-minute charts and run AutoScan once. As soon as AutoScan runs, it will "monitor" all the symbols in the custom data list in the background. Then, in real time, it will alert you if the buy/sell conditions are met. As soon as there is an alert for any market, AutoScan will send out visual, sound, or e-mail alerts. Compared to the classical trading method, you have many more choices given to you of markets that are presenting the best conditions to trade. You don't have to wait for entries.

AutoScan can be done with daily, weekly, monthly, or intraday charts (such as 5-minute, 30-minute, etc.). Typical parameter settings of the AutoScan can be seen in Figure 7.3.

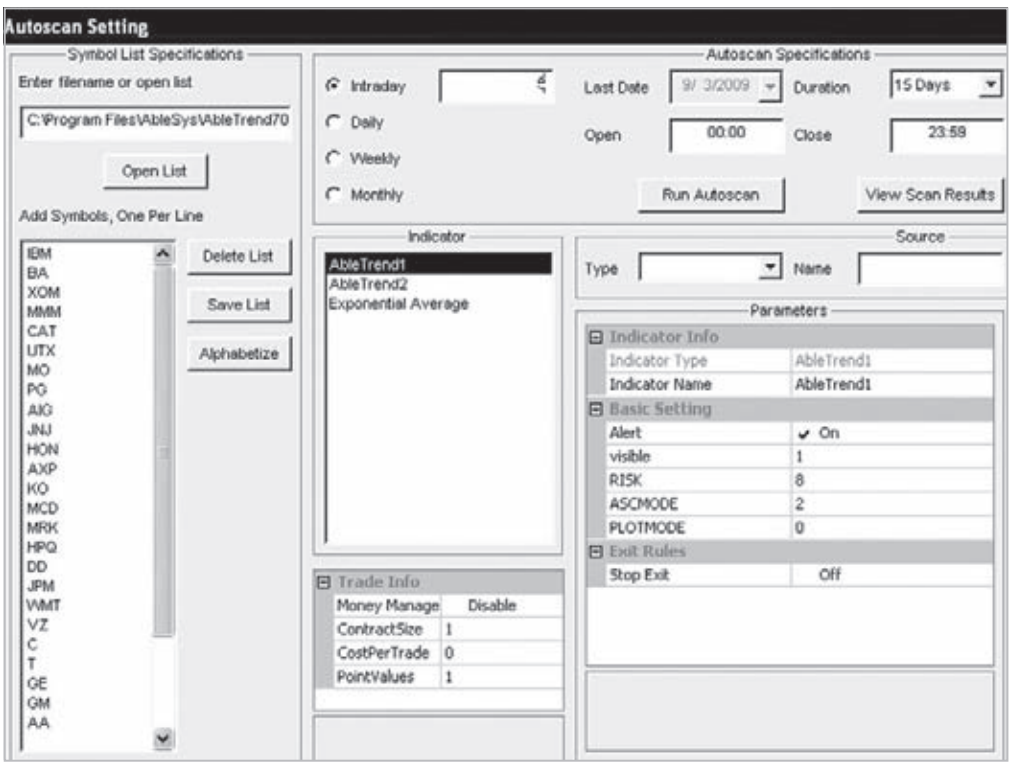


FIGURE 7.3 Example of AutoScan settings.

THE PERCENT CHARTS

There is a big demand for comparisons of the tradability of different markets. For example:

- How does the Dow Jones industrial average (DJIA) index compare with the S&P 500 index and the NASDAQ index?
- How do EUD/USD, GBP/USD, and AUD/USD Forex markets compare with one another? Which one is the best for trading if you can select only one?
- How do you compare several tech stocks with each other, such as MSFT, INTC, and DELL? Which one is the best for trading if you can select only one?

The price scales of the markets just mentioned are different—very different—from one another, and therefore it is difficult to plot them on the same chart to compare them. However, if we may select a day, and assume the prices of that day as the corresponding market's "unit," we may convert all the historical data of the past to a percentage based on the units, and then compare them. Now we will have the same scale data sets with percentage units. They are called the "Percent Charts." We may easily display and compare which market is moving faster within the same time period.

For example, on July 9, 2009, DJIA was 8,146.52, S&P 500 was 879.13, and NASDAQ was 1,756.03. We assume the 8,146.52 as the unit for DJIA, and we may then convert all the historical data of DJIA to a percentage. Following the same procedure, we set the 879.13 as a unit for S&P 500, and 1,756.03 as the unit for NASDAQ, and based on that, we then convert the S&P 500 and NASDAQ historical data to percentage data. Now we may display the three markets on the same scale chart. We can then easily know that as we are looking at the charts in 2009, NASDAQ has the best performance, followed by S&P 500, and finally DJIA. If you can choose only one market to trade, you might choose the NASDAQ based on the comparisons of the percent charts of three markets.

Using the same procedure, we may plot the percent charts of EUR/USD, GBP/USD, and AUD/USD to the same chart. We might use the bottom of the March 2, 2009, closing prices of these symbols as the unit. After doing this, it is easy to see that AUD/USD moved up 123.54 percent, GBP/USD moved up 115.37 percent, and EUR/USD moved up 110.76 percent in four months. Trading profits are made from the market movements. For traders, if a market can move in a larger range within the same time, it is a better trading vehicle. Therefore, we would select to trade AUD/USD in the example.

Using this same approach, we may compare crude oil and gold futures, DJIA and $VIX, INTC and DELL stocks, and so forth. Looking at normal bar charts, your eyes cannot easily see the relationships between markets. With percent charts, relationships are visually displayed. For example, you might notice that the top of the $VIX line is the bottom of the DJIA line. You may get useful information from percent chart comparisons that give visual hints for our trading.

THE GUIDANCE CHARTS

In Chapter 5, we mentioned it can be helpful to use the trend direction on daily charts to guide our trading with intraday charts. Here the daily chart is used as the so-called guidance chart. Of course, you may also use the 60-minute chart as guidance to trade the 5-minute chart, etc. Our back-testing reports clearly show that this method can significantly improve results. If the guidance chart is trending, the winning rate could be up to 80 percent or more. If the guidance chart is choppy, of course, you may have losing trades. However, since you trade only one direction the same as the guidance chart, your losing trades would be cut in half.

There are three ways to set up a guidance chart:

1. **Classical Guidance Charts:** A classical guidance chart is set up side by side with the trading chart. If you use a 30-minute chart as the trading chart, you may set up a daily chart next to that chart for use as the guidance chart. Add the T1 and T2 indicators to both charts. If the daily chart is blue, indicating an uptrend, then you should take only the long trade signals of your trading chart; and vice versa for the downtrend, where you would take only the short trade signals. Some traders like to set up a few guidance charts, such as the daily, 120-minute, and 60-minute charts as guidance charts. There are pros and cons to doing this. The pro is that you have stronger confirmation of a trend if all the guidance charts are in the same direction. The con is that you may experience confusion if the guidance charts are in contradiction to each other. If this kind of confusion occurs, we suggest using the longer time interval chart (i.e., in this instance the daily chart) as your guide.
2. **Overlapping Guidance Charts:** Overlapping guidance charts are normally set up below your trading chart. The guidance chart is added to the same trading chart window, but in the subgraph. The time scale of both the trading chart and guidance chart will exactly line up. Add the T1 and T2 indicators to both charts. Following this method will give you a clear picture of the guidance direction. You may format the guidance chart as a line on close. If you see a blue line in the guidance chart, it means you should take the long trade only; if you see a red line, take the short trade only. Most other charting software programs are simple, and they may or may not have this ability to plot overlapping charts. If your trading software has the capability, then we suggest you try using it.
3. **Hidden Guidance Charts:** A hidden guidance chart is a guidance chart added to the same window as your trading chart, but it is hidden—you cannot see it. Add the T1 and T2 indicators to the trading chart and T2 to the guidance chart. The signals of the T2 indicator of the guidance chart will be displayed on the trading chart. This setting will create a magic effect on the trading chart. You may clearly view the trading signals and guidance on the same chart. You may see the guidance T2 colored dots and their values on the trading chart. This built-in capability for hidden charts in the AbleTrend software has become one of the favorite features of AbleTrend users.

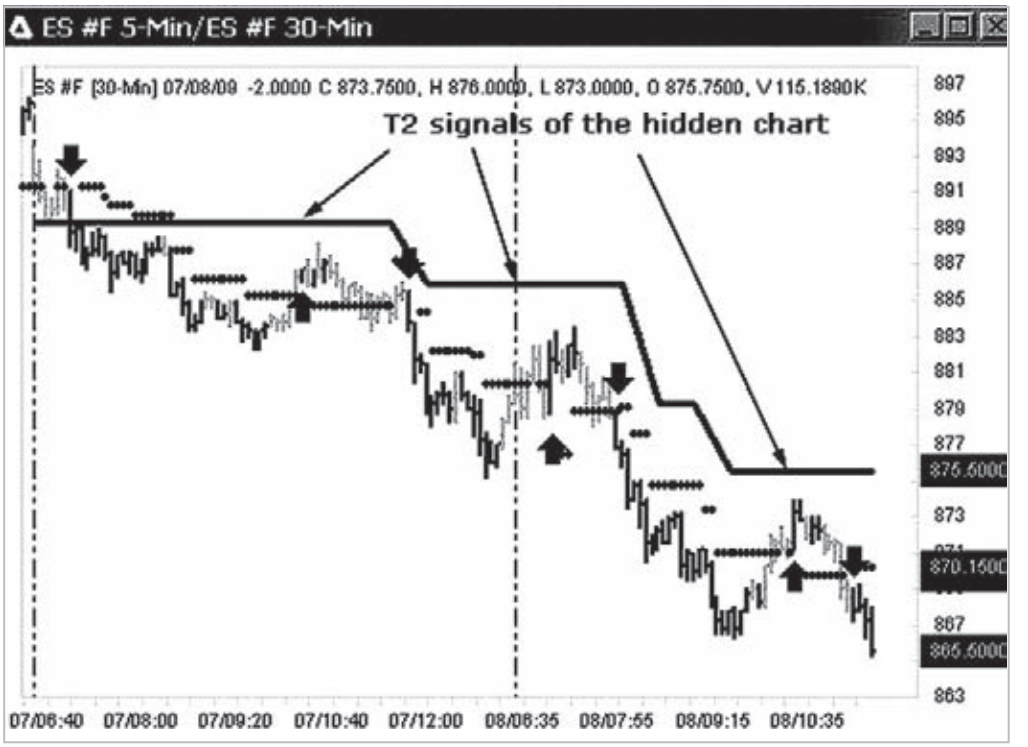


FIGURE 7.4 Hidden guidance chart. The trading chart is a 5-minute chart of E-mini S&P 500 futures. The hidden guidance chart is a 30-minute chart of the market. The T2 signal style is a colored line. The line above the bars is the guidance, which shows the trend direction is downtrend and indicates the key resistance levels on the 30-minute chart. Thanks to the guidance chart, we can take the short trades only, and avoid the long signals.

The example in Figure 7.4 shows the effect of the T2 signals on a hidden guidance chart. The trading chart is a 5-minute chart of E-mini S&P 500 futures. The hidden guidance chart is a 30-minute chart of E-mini S&P 500 futures. The T2 signal style is a colored line. The line shows the trend direction and longer-term stop values.

STOCK SEARCH ENGINE—STOCK PICKS

There are over 10,000 stocks traded in the United States. One of the biggest differences between stock trading and futures or Forex trading is the stock-picking process. There are two issues to be faced in stock trading:

1. Which stocks should we trade?
2. How should we trade the stocks?

AutoScan of AbleTrend can be automatically linked with the WinTick stock-picking lists with a click. Doing this allows you to resolve both issues at the same time.

Stock picking is the first step in trading stocks and it is big business in itself. There are software programs, newsletters, TV programs, analyst rating services, online screen services, and so on, all of them claiming to offer stock picks with great profit potential. The goal in picking stocks is to be objective and determine good picks. However, it is important to realize that picking stocks for trading is totally different from picking stocks for investment. For making investments, using fundamental analysis to make our selection is basic. However, for trading purposes, we normally do not have any interest in fundamentals. We focus on technical analysis and whether a market is trending or choppy. Beware of stock-picking services that tell you what to trade, but do not provide back-testing reports. The stocks might be up 25 percent in two years, but they might go down 50 percent in one year, then move up, and so on. These services cannot tell you how to trade based on anything substantial.

What Is WinTick?

AbleSys's WinTick, the industry's first Web-based mechanical trading system with back-testing reports, is also a market search engine for hot stock picks. Using time-tested, award-winning AbleTrend technology, WinTick scans through more than 10,000 U.S. stocks and 43 futures markets at the end of day from a well-maintained database. WinTick provides extensive daily reports such as today's hot picks, next day buy/sell target prices, back-testing performance results, performance comparison between WinTick and buy/hold, customized portfolio management, and much more. Online charting platform and end-of-day data are all included. AbleTrend1 and AbleTrend2 indicators are automatically plotted on the charts.

The Competitive Edge in Picking Stocks

Picking stocks can be an arduous task. Not only is the quantity of available stocks large (there are over 10,000 symbols to choose from), but also the characteristics of each symbol are changing constantly, and the rate of these changes keeps increasing. Without advanced technology, more information would only cause more confusion.

WinTick, the new innovation of AbleSys, offers people a competitive edge in picking symbols. No longer do you need to be tied up with the laborious task of viewing chart after chart. No longer do you need to download, review, or maintain huge databases. WinTick completely automates the search process. This fantastic feature liberates you. It gives you the power to search through a huge number of markets that you would otherwise not be able to approach. This power greatly enables you to diversify your investment portfolio.

Best of all, WinTick is based on time-proven AbleTrend technology, with no analyst's bias involved. WinTick, which has won awards for 15 consecutive years since its release, allows traders to test the market without risking any money. The software allows traders to discover the most profitable symbols in today's fast-moving markets before risking one penny trading. The major difference between WinTick and other stock-picking tools is its objectivity. It's based on the 100 percent mechanical back-testing reports of AbleTrend, and therefore, its stock picks should work well with the AbleTrend trading system software. There are no other stock-picking tools or services that combine the picking process with a specific trading system.

Stock Lists of WinTick

- WinTick Top Rating Picks
- WinTick Today's Hot Picks
- Search WinTick positions for individual stocks
- Your Portfolio WinTick Position Manager
- Stocks with the Best AbleTrend Back-Testing Results in Last 400 Days
- WinTick Major Indices
- WinTick Today's Buy/Sell Signals: This is a list of stocks that WinTick gives position changes (from any BUY/SELL/SIDEWAY to any SELL/BUY/SIDEWAY) on the reporting date.
- WinTick Most Traded and Volume Leaders
- WinTick Today's Winners and Losers
- WinTick Top Gainers in 1 Week
- WinTick Top Gainers in 3 Months
- WinTick Top Gainers in 6 Months
- WinTick Top Gainers in 12 Months
- WinTick 52-Week High and Low Stocks
- WinTick IPO Stocks

WinTick for Futures WinTick also covers 43 commonly traded futures markets in the United States. Daily reports for those major futures and commodities with today's buy/sell signals and WinTick Portfolio Manager tool are also available.

VISUAL OR CHART TRADING

With the classical trading process, three steps are involved:

1. Collecting data.
2. Charting and identifying trading signals.
3. Order execution.

For order execution, there are three methods for placing orders:

1. Manual trading orders
2. Visual trading orders
3. Automated trading orders.

In recent years, visual or chart trading has become more and more popular in trading software. The major feature is not using the keyboard at all, using only the chart, graphic lines, and mouse.

Visual order placement is built-in to AbleTrend software. The program allows you to click an icon labeled "Trade Mode"—TM to place a market, stop, or limit order directly from the chart with your mouse clicks (see Figure 7.5). All you need is your mouse and a visual display line position on the chart. The position of your mouse on the chart will be your stop or limit order price. As soon as the orders are filled, the up- or down-arrows represent your open or close positions. The blue or red lines are your open protection stops or limit orders.

FIGURE 7.5 Chart trading mode. Market, stop, or limit order is just one click away. For example, the last price for stock USO is 35.52. When you put your mouse above the last price, you may click to place a "Sell Limit" order or "Buy Stop" order.

As soon as your order is placed, you will see a line or arrow representing the order or position on the chart. You may drag and move the line to change your stop or limit order, and you can exit or change the order with just one click. This allows you to visually see where your positions are in relation to the graph, and it works especially well with a visual trading system like ours, where support and resistance are plotted on the chart. Also the P/L will keep tracking the position's profit/loss in real time.

AUTOMATED TRADING ORDERS

Auto Order Execution (AOE) is a feature built in to the AbleTrend software that is available to traders as an option. When you have Buy/Sell/Stop/Exit signals for certain symbols, the software will automatically fill in the Order Entry form. Users are one click away from being able to "Submit" their orders. Or, you may set up "fully auto mode" to submit your orders automatically without any human intervention. This will significantly increase the speed of order executions. The Auto Order Execution module works with Money Management strategies. It will automatically fill in the proper trading size according to your current account equity (balance). Order execution becomes just a click away, or it can be fully automated.

Advantages of Auto Order Execution (AOE):

- Electronic hands-free automated trading.
- Helps to significantly minimize slippage.
- Helps to reduce the influence of human emotions.
- Trading signals and market orders are simultaneously sent.
- Orders can be filled almost instantaneously.
- Best used with 24-hour markets.
- Appropriate for trading intervals of 30 minutes or above.

In case of emergency or power down: In trading, anything can go wrong. In the event of a power down, or the Internet going down, or the computer locking up, or other emergency situations, the trading software's AOE cannot do anything at that time. Traders would have to call their broker to help take care of their trading positions in these situations. As soon as the computer and software come back on, the first thing the AOE module does is to automatically align your trading account positions with the charts' positions.

OPTIONS TRADING

There are two kinds of options, calls and puts, for stock, futures, and commodity trading. Calls give options purchasers the "right" to buy the underlying market at a specific price

(strike price) within a certain period of time (before exercise date or expiration). Puts give options purchasers the "right" to sell the underlying market at a specific price within a certain period of time (before exercise date or expiration).

Options are purchased for a set amount of money, known as the premium. The advantage of buying options is that traders have the right to buy or to sell the underlying market at certain prices, but their risk is limited to the premium paid. Only the simple options—buy calls or buy puts—can offer this advantage. Any strategies that involve sell calls or sell puts will expose the trader to unlimited risk.

There are six factors affecting options prices:

1. Underlying market price.
2. Strike price.
3. Volatility.
4. Time to expiration.
5. Interest rate.
6. Dividend.

Among these, the underlying market price is the king. Fortunately, AbleTrend only deals with the market price—the key element for options, and therefore AbleTrend is the most powerful tool for trading options.

What's the Most Efficient Way to Trade Options?

Options trading has been getting more and more complicated in recent years due to the efforts of some "options universities" and "experts." For example, I took a look at one course that offered over 30 options trading strategies. Eventually people seemed to forget why they were trading options in the first place.

AbleTrend sticks to the basics by providing core information concerning the market trend (its up or down direction). As mentioned earlier, the underlying market price is king. Our options strategies become simple and easy to implement if we know whether the market is rising, flat, or declining in direction. We may simply buy near-term in-the-money calls if the market is in an uptrend, or buy near-term in-the-money puts if the market is in a downtrend. This is the most efficient way to trade options.

What Is the Delta in Options Trading?

All the complicated options strategies that have been offered are for people who don't know the market direction (trend) and are trying to protect themselves from possibly big losses if they choose a wrong direction. AbleTrend, however, provides the key market trend information for underlying price change so that traders may choose the

simplest and most effective strategy—buying calls or buying puts according to the trend direction.

Traders will get the biggest Delta for such options, and are in a position to really make money from the market trend. Delta in options trading indicates how fast an options is changing in value relative to the price of the underlying stock or futures contract. Delta can range from 0 to 1 for call options, and from 0 to −1 for put options. The higher the Delta, the more the options increases in value relative to the futures price, and the more profitable the options is. For example, with a Delta of 1 (for a call options), the options price is increasing one to one with the underlying price. This would be the ideal condition.

With the simple Buy Calls or Buy Puts strategy that AbleTrend users employ, the Delta is an impressive 0.7 to 0.9 in most cases. This means that traders may have limited risk, while enjoying the biggest possible profits.

If the overall Delta is positive, it means you hold an overall long position. If the overall Delta is negative, it means you hold an overall short position. And the position should follow the AbleTrend direction.

SPREAD TRADING

We will now examine spread trading methods with respect to trend analysis. Futures spread trading is probably one of the most profitable, yet safest ways to trade the futures markets. Professional traders use spreads to optimize their profits. Trading spreads offers many advantages that make it an ideal trading instrument, especially for traders with small accounts (less than $10,000).

What Is a Futures Spread?

The terms “spread” and “straddle” are synonymous, and refer to the simultaneous purchase and sale of futures contracts. There are several different varieties of spreads:

- Inter-delivery—a spread on the same exchange, in the same commodity, in different delivery months.
- Inter-market—a spread in the same commodity, but on different exchanges.
- Inter-commodity—a spread between two different commodities having the same delivery month on the same exchange.
- Commodity product—a spread between a commodity and products derived from that commodity; for example the soybean crush and reverse crush spreads. A soybean crush spread combines long soybean futures with short soybean oil and soybean meal futures positions.

Traders should be aware that the spread position is not necessarily less risky than a simple long or short position.

Futures spread trading offers the following four advantages:

1. A better trend that is easy to trade.
2. Low margin requirement.
3. Higher return to margin.
4. Less time is involved.

Why Spread Offers a Better Trend

We will look more closely at the first advantage: why these trades offer a better trend.

Spread trades are allowed to trend without the interference and noise caused by computerized trading, scalpers, and market movers. Each market has so-called market noise produced by random market forces—for example, Joe wants to close his positions now due to a family emergency or a news release he read. When trading a spread, we subtract one market price from another, and the normal noise in the two markets tends to cancel each other out, leading to a significant reduction in noise. As a result, the real difference between the markets will show more clearly. If the markets are trending, the differences between those trends are much more visible.

PORTFOLIO TRADING

This is a conservative model through diversification: Position Trading with "Fixed" settings and daily charts (trading the mid-term trend).

Advantage of Diversification

There is a distinct advantage to creating a diversified portfolio of markets to trade using the AbleTrend 100 percent mechanical trading system. The fact is that total profits of the portfolio is the sum of profits of each individual market. Total overall maximum drawdown (MDD) is less than the MDD of each individual market. Therefore, we may see a much better reward/risk (R/R) ratio.

Here

$$R/R = \text{Total Profits} / \text{Overall MDD}$$

Based on our previous experiences, if R/R for an individual market is 2 to 3, then the overall R/R of a market portfolio could reach 10 or above.

Diversification spreads your risk across numerous financial instruments, reducing the impact that poor returns from any one investment is likely to have on your overall portfolio.

How Diversification Works

Diversification follows a simple logic:

- The prices of individual stocks and/or futures markets often do not rise and fall or trend in tandem. When one type of investment is trending, another may not (it may be exhibiting whipsaw or choppy price action).
- By trading in two or more types of financial instruments, you increase the possibility that when one is doing poorly, another might be doing well. Your winner's good performance can offset your loser's disappointing returns.
- The end result: Your portfolio's overall performance is likely to be less volatile, that is, undergo less account equity fluctuation, than a portfolio invested in just one financial instrument. Put another way, your well-diversified portfolio will achieve higher returns for a given level of risk.
- Don't put too many markets into one portfolio. Normally we build a trading portfolio with four to six markets. In recent years, people have tended to add a few ETFs to a portfolio, for example, SPY, QQQQ, etc. SPY alone is composed of 500 stocks, and QQQQ is composed of 100 stocks.

Keep in mind that although diversification can't entirely eliminate market risk, it will generally have the effect of creating less overall risk, resulting in a smoother equity yield curve with more manageable drawdowns.

Ways to Diversify

The first and most conservative strategy is to create a diversified portfolio of traded markets using longer time interval bars such as the daily charts. We have already done the work to show you various combinations of fixed parameter settings (based on daily charts and mid-term trend) one could trade, along with recommended start-up amounts based upon historical drawdown and margin requirements.

Examples of Portfolio Trading Using AbleTrend

Futures Portfolio Using fixed parameter settings and back-testing for the last 10 years with four futures markets—US Dollar Index (DX), Crude Oil (CL), Soybean (S), and Treasury Bond (US)—the account equity line for the last 10 years for this portfolio with daily charts is plotted in Figure 7.6. The overall testing results are summarized in Table 7.2. Combined net profits, MDD, R/R, minimum account size, and percentage return are listed in the table.

Example of Futures Portfolio (10 Years):

Back-Testing 8/26/1998 to 1/5/2007
Forward-Testing 1/5/2007 to 7/10/2009
Portfolio: **DX, CL, S, and US** (daily charts)

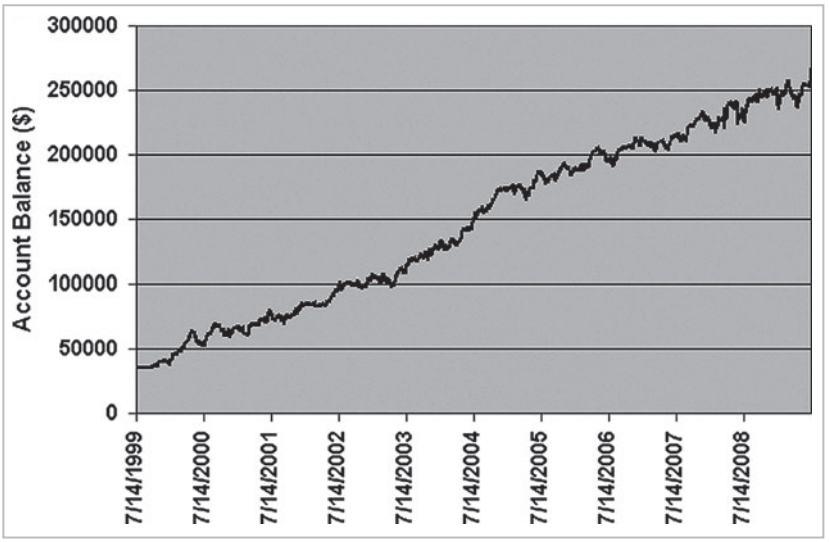


FIGURE 7.6 Example of a portfolio equity line plotted in Microsoft Excel. AbleTrend software can output equity line to a text file. This equity line showed more smoothly with a portfolio, and parameters derived from a back test can be fixed and keep working for a long-term forward testing (two and a half years in this example).

- Initial Account Size: $35,000.
- Net Profit: $231,983.
- Each market trading 1 contract along the way.
- $75 cost per trade was deducted.
- Forward testing: all parameters were fixed on 1/5/2007.
- Use daily chart and EBC results (100 percent mechanical).
- Money Management routine was not used to compound the results. Also, at the beginning of each year, the account was reset to the initial size.

This example of futures portfolio trading showed a smoother account equity line. Reward/Risk (R/R) ratio could reach over 10 while individual market's R/R had only 2 to 5. Both back-testing and forward testing worked well. The parameters derived from a back test can be fixed and keep working for a long-term forward testing. Month-by-month performance (the net profits) of the portfolio is summarized in Table 7.3.

TABLE 7.2 Summary of Futures Portfolio

Combined Profits	Combined MDD	R / R	Minimum Account Size	Portfolio	Return on Mini. Acct.
231983.88	21305.59	10.89	35305.59	{DX,CL,S,US}	657.07%

TABLE 7.3 Month-by-Month Report of Futures Portfolio

Month	Net Profits	Account Balance	Yearly Return	APR
Jul-99	0.00	35000.00		
Aug-99	0.00	35000.00		
Sep-99	0.00	35000.00		
Oct-99	2270.00	37270.00		
Nov-99	3326.70	40596.70		
Dec-99	272.50	40869.20		
1999	5869.20	40869.20	16.77%	36.35%
Jan-00	5802.49	40802.49		
Feb-00	2428.71	43231.20		
Mar-00	4580.00	47811.20		
Apr-00	6219.43	54030.63		
May-00	(621.70)	53408.93		
Jun-00	(4536.30)	48872.63		
Jul-00	4227.51	53100.14		
Aug-00	8134.10	61234.24		
Sep-00	1103.00	62337.24		
Oct-00	(4442.50)	57894.74		
Nov-00	(1046.31)	56848.43		
Dec-00	4101.42	60949.85		
2000	25949.85	60949.85	74.14%	60.50%
1-Jan	(1737.50)	33262.50		
1-Feb	(2424.99)	30837.51		
1-Mar	7749.49	38587.00		
1-Apr	186.21	38773.21		
1-May	3343.79	42117.00		
1-Jun	4033.71	46150.71		
1-Jul	(5502.55)	40648.16		
1-Aug	2130.00	42778.16		
1-Sep	108.51	42886.67		
1-Oct	2520.66	45407.33		
1-Nov	484.10	45891.43		
1-Dec	5993.81	51885.24		
2001	16885.24	51885.24	48.24%	55.48%
2-Jan	2294.49	37294.49		
2-Feb	(305.00)	36989.49		
2-Mar	(2605.00)	34384.49		
2-Apr	857.50	35241.99		
2-May	5073.75	40315.74		
2-Jun	7251.29	47567.03		
2-Jul	671.21	48238.24		
2-Aug	4057.50	52295.74		
2-Sep	(1692.61)	50603.13		
2-Oct	(646.21)	49956.92		
2-Nov	1612.30	51569.23		
2-Dec	2697.61	54266.84		
2002	19266.84	54266.84	55.05%	55.36%

TABLE 7.3 (*Continued*)

Month	Net Profits	Account Balance	Yearly Return	APR
3-Jan	1544.98	36544.98		
3-Feb	73.71	36618.70		
3-Mar	(4333.80)	32284.89		
3-Apr	(867.19)	31417.70		
3-May	8617.54	40035.24		
3-Jun	505.30	40540.55		
3-Jul	9095.05	49635.59		
3-Aug	2140.00	51775.59		
3-Sep	3325.69	55101.28		
3-Oct	(114.50)	54986.78		
3-Nov	307.50	55294.28		
3-Dec	4132.23	59426.52		
2003	24426.52	59426.52	69.79%	58.46%
4-Jan	2262.50	37262.50		
4-Feb	(563.77)	36698.73		
4-Mar	2556.90	39255.63		
4-Apr	2158.71	41414.34		
4-May	8802.63	50216.98		
4-Jun	1109.99	51326.97		
4-Jul	9201.58	60528.55		
4-Aug	6737.50	67266.05		
4-Sep	1149.61	68415.66		
4-Oct	3909.38	72325.03		
4-Nov	8220.30	80545.33		
4-Dec	1470.00	82015.33		
2004	47015.33	82015.33	134.33%	70.14%
5-Jan	420.41	35420.41		
5-Feb	(1007.50)	34412.91		
5-Mar	(590.31)	33822.59		
5-Apr	(1946.28)	31876.31		
5-May	5498.78	37375.09		
5-Jun	10245.19	47620.28		
5-Jul	(6702.50)	40917.78		
5-Aug	935.02	41852.80		
5-Sep	(285.02)	41567.78		
5-Oct	9497.50	51065.28		
5-Nov	0.81	51066.09		
5-Dec	(3476.22)	47589.88		
2005	12589.88	47589.88	35.97%	64.37%
6-Jan	1513.13	36513.13		
6-Feb	785.00	37298.13		
6-Mar	6830.00	44128.13		
6-Apr	6926.55	51054.67		
6-May	(1787.50)	49267.17		

(*Continued*)

TABLE 7.3 (*Continued*)

Month	Net Profits	Account Balance	Yearly Return	APR
6-Jun	(6797.50)	42469.67		
6-Jul	(972.52)	41497.16		
6-Aug	7234.98	48732.14		
6-Sep	5412.92	54145.06		
6-Oct	1532.52	55677.58		
6-Nov	5278.69	60956.27		
6-Dec	(5702.50)	55253.77		
2006	20253.77	55253.77	57.87%	63.49%
7-Jan	935.61	35935.61		
7-Feb	47.50	35983.11		
7-Mar	567.97	36551.08		
7-Apr	1160.00	37711.08		
7-May	(5332.47)	32378.61		
7-Jun	9397.50	41776.11		
7-Jul	(1438.00)	40338.11		
7-Aug	(1665.00)	38673.11		
7-Sep	12436.89	51110.00		
7-Oct	2415.00	53525.00		
7-Nov	6998.70	60523.70		
7-Dec	(6885.00)	53638.70		
2007	18638.70	53638.70	53.25%	62.25%
8-Jan	(4930.00)	30070.00		
8-Feb	5249.41	35319.41		
8-Mar	5733.11	41052.52		
8-Apr	7311.91	48364.42		
8-May	1915.58	50280.00		
8-Jun	(9783.81)	40496.19		
8-Jul	5857.80	46353.98		
8-Aug	4487.45	50841.44		
8-Sep	1814.41	52655.84		
8-Oct	6626.91	59282.75		
8-Nov	543.09	59825.84		
8-Dec	(522.50)	59303.34		
2008	24303.34	59303.34	69.44%	62.99%
9-Jan	(2476.78)	32523.22		
9-Feb	6693.44	39216.66		
9-Mar	(7102.09)	32114.56		
9-Apr	(7495.61)	24618.95		
9-May	15623.67	40242.63		
9-Jun	(852.53)	39390.09		
9-Jul	12395.13	51785.22		
2009	16785.22	51785.22	47.96%	64.73%

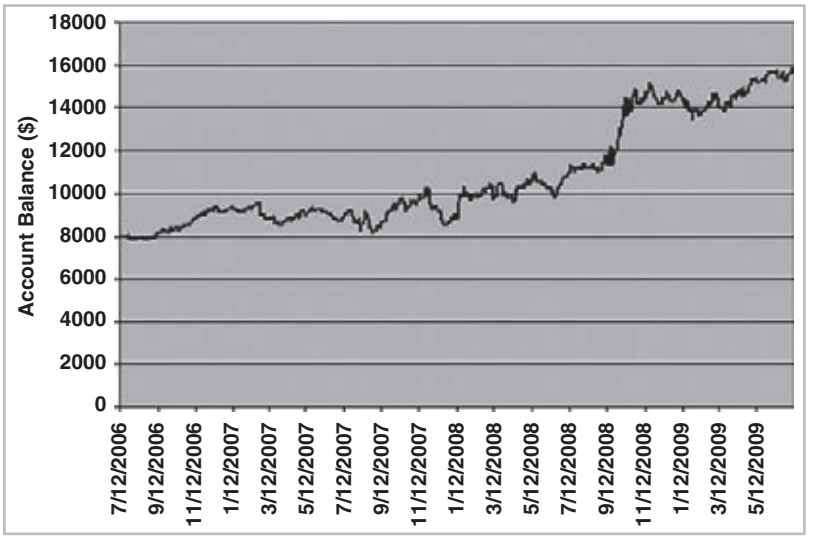


FIGURE 7.7 Example of a portfolio equity line plotted in Microsoft Excel. AbleTrend software can output equity line to a text file. This equity line showed more smoothly with a portfolio, and the equity line was up during the economic crisis from late 2008 to early 2009.

Stock Portfolio Using fixed parameter settings, an account equity line of back-testing for the last three years for DIA, QQQQ, EWH, XLE, XLB, and GLD daily chart is plotted in Figure 7.7. The back-testing is from 7/10/2006 to 7/10/2009.

The back-testing results are summarized in Table 7.4. Combined net profits, MDD, R/R, minimum account size, and percentage return are listed in the table.

- Initial Account Size: $8,000.
- Net Profit: $7,801.
- Select six stocks from ETFs.
- Each stock started trading with $1,000.
- $20 cost per trade was deducted.
- Use daily chart and EBC results (100 percent mechanical).
- Money Management routine was not used to compound the results. Also, at the beginning of each year, the account was reset to the initial size.

This example of ETF portfolio trading of the last three years showed a smoother account equity line. Back-testing worked well during the economic crisis from late 2008 to early 2009 while many portfolios dropped 40 percent in value. Each ETF market is a portfolio. Month-by-month performance (the net profits) of the portfolio is summarized in Table 7.5.

TABLE 7.4 Summary of Stock Portfolio

Combined Profits	Combined MDD	R / R	Minimum Account Size	Portfolio	Return on Mini. Acct.
7801.54	1751.86	4.45	7751.86	{QQQQ,EWH,DIA,XLB,GLD,XLE}	100.64%

TABLE 7.5 Month-by-Month Results of Stock Portfolio

Month	Net Profits	Account Balance	Yearly Return	APR
6-Jul	(71.16)	7928.84		
6-Aug	17.81	7946.65		
6-Sep	219.20	8165.85		
6-Oct	367.11	8532.96		
6-Nov	649.28	9182.24		
6-Dec	(85.97)	9096.27		
2006	1096.27	9096.27	13.70%	29.28%
7-Jan	80.46	8080.46		
7-Feb	(234.70)	7845.76		
7-Mar	(494.07)	7351.69		
7-Apr	362.85	7714.54		
7-May	445.89	8160.43		
7-Jun	(525.85)	7634.58		
7-Jul	(33.16)	7601.42		
7-Aug	(398.59)	7202.83		
7-Sep	980.11	8182.94		
7-Oct	340.42	8523.36		
7-Nov	(305.82)	8217.54		
7-Dec	(706.66)	7510.88		
2007	(489.12)	7510.88	−6.11%	4.45%
8-Jan	1197.00	9197.00		
8-Feb	397.39	9594.39		
8-Mar	(148.89)	9445.50		
8-Apr	177.87	9623.37		
8-May	187.87	9811.24		
8-Jun	18.07	9829.31		
8-Jul	682.67	10511.98		
8-Aug	(16.83)	10495.15		
8-Sep	1516.13	12011.28		
8-Oct	1586.05	13597.33		
8-Nov	312.30	13909.63		
8-Dec	(59.30)	13850.33		
2008	5850.33	13850.33	73.13%	27.85%
9-Jan	(571.05)	7428.95		
9-Feb	403.24	7832.19		
9-Mar	(229.65)	7602.54		
9-Apr	935.59	8538.13		
9-May	507.49	9045.62		
9-Jun	(127.02)	8918.60		
9-Jul	425.46	9344.06		
2009	1344.06	9344.06	16.80%	28.35%

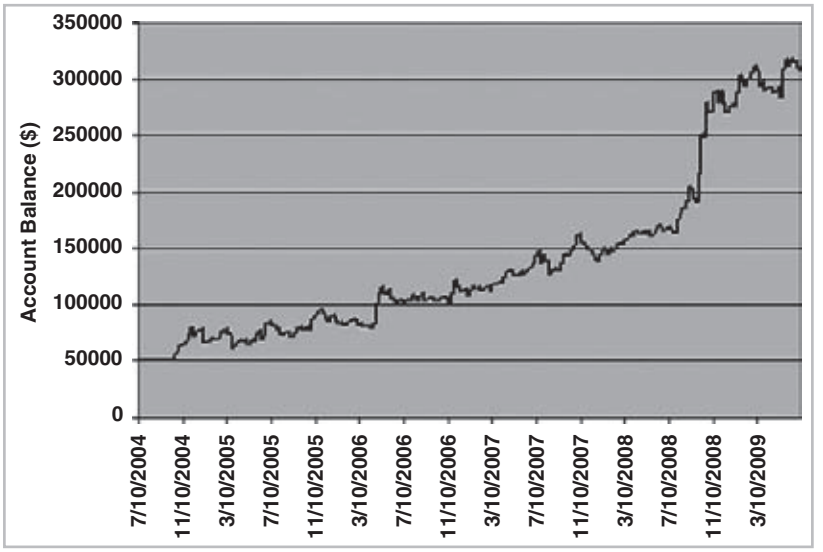


FIGURE 7.8 Example of a portfolio equity line plotted by Microsoft's Excel software. AbleTrend software can output equity line to a text file. This equity line showed more smoothly with a portfolio, and fixed parameters can work well for Forex markets in a long term (five years in this example).

Forex Portfolio Using fixed parameter settings, this example of Forex portfolio back-testing is for AUD/USD, USD/CAD, USD/CHF, EUR/USD, GBP/USD, and USD/JPY markets for the last five years. An account equity line for the last five years for this portfolio with weekly charts is plotted in Figure 7.8. The overall back-testing results are summarized in Table 7.6. Combined net profits, MDD, R/R, minimum account size, and percentage return are listed in the table.

Example of Forex Portfolio

Back-testing with weekly charts of five years (7/10/2004 to 7/10/2009)

- Initial Account Size: $50,000.
- Net Profit: $257,057.
- Each market trading one contract along the way.
- $50 cost per trade was deducted.
- Use weekly charts and EBC results (100 percent mechanical).
- Money Management routine was not used to compound the results. Also, at the beginning of each year, the account was reset to the initial size.

TABLE 7.6 Summary of Forex Portfolio

Combined Profits	Combined MDD	R / R	Minimum Account Size	Portfolio	Return on Mini. Acct.
257056.91	27200.00	9.45	45200.00	{GBP,CAD,AUD,CHF,EUR,JPY}	568.71%

TABLE 7.7 Month-by-Month Results of Forex Portfolio

Month	Net Profits	Account Balance	Yearly Return	APR
4-Jul	0.00	50000.00		
4-Aug	0.00	50000.00		
4-Sep	(50.00)	49950.00		
4-Oct	13720.00	63670.00		
4-Nov	16422.00	80092.00		
4-Dec	(1560.00)	78532.00		
2004	28532.00	78532.00	57.06%	146.69%
5-Jan	(9769.99)	40230.01		
5-Feb	7389.99	47620.00		
5-Mar	(12069.98)	35550.02		
5-Apr	837.59	36387.61		
5-May	8970.01	45357.62		
5-Jun	9024.03	54381.65		
5-Jul	(9040.01)	45341.64		
5-Aug	(1880.00)	43461.64		
5-Sep	9499.99	52961.63		
5-Oct	5780.00	58741.63		
5-Nov	4240.00	62981.63		
5-Dec	(7160.00)	55821.63		
2005	5821.63	55821.63	11.64%	45.41%
6-Jan	(2609.98)	47390.02		
6-Feb	4959.99	52350.00		
6-Mar	(5819.97)	46530.03		
6-Apr	28728.51	75258.54		
6-May	3137.59	78396.12		
6-Jun	(9849.98)	68546.14		
6-Jul	5839.99	74386.13		
6-Aug	1030.02	75416.15		
6-Sep	(5711.20)	69704.95		
6-Oct	2039.99	71744.94		
6-Nov	15449.97	87194.91		
6-Dec	(14539.98)	72654.93		
2006	22654.93	72654.93	45.31%	45.37%
7-Jan	8046.59	58046.59		
7-Feb	330.02	58376.62		
7-Mar	4210.00	62586.62		
7-Apr	8430.01	71016.63		
7-May	1170.00	72186.63		
7-Jun	6880.01	79066.63		
7-Jul	6490.02	85556.65		
7-Aug	(11595.63)	73961.02		
7-Sep	12309.97	86270.98		
7-Oct	18160.02	104431.00		
7-Nov	(10119.01)	94311.99		
7-Dec	(7259.98)	87052.01		
2007	37052.01	87052.01	74.10%	53.06%

TABLE 7.7 (*Continued*)

Month	Net Profits	Account Balance	Yearly Return	APR
8-Jan	5530.00	55530.00		
8-Feb	5479.98	61009.98		
8-Mar	6250.02	67260.00		
8-Apr	3960.00	71220.00		
8-May	1819.98	73039.98		
8-Jun	(402.58)	72637.41		
8-Jul	(2790.01)	69847.40		
8-Aug	41750.02	111597.42		
8-Sep	10370.00	121967.42		
8-Oct	54428.00	176395.42		
8-Nov	18910.00	195305.42		
8-Dec	(10332.02)	184973.41		
2008	134973.41	184973.41	269.95%	86.22%
9-Jan	13775.52	63775.52		
9-Feb	18472.39	82247.91		
9-Mar	(21990.00)	60257.91		
9-Apr	(410.00)	59847.91		
9-May	22135.00	81982.91		
9-Jun	(220.00)	81762.91		
9-Jul	(3739.97)	78022.94		
2009	28022.94	78022.94	56.05%	89.26%

This example of Forex portfolio trading of the last five years showed a smoother account equity line. Forex markets are the most trending markets. With the portfolio trading six markets, the Reward/Risk (R/R) ratio was above 9, indicating a very good performance. An APR of 89 percent showed Forex markets are very good trading instruments for trend-following methods. Month-by-month performance (the net profits) of the Forex portfolio is summarized in Table 7.7.

SUMMARY

We briefly introduced here some advanced tools of today's trading software, including AbleTrend or other software. We covered virtual paper trading (VPT), historical forward testing (HFT—trading simulation), AutoScan, percent charts, guidance charts, stock pick tools, visual or chart trading, automated trading orders, options trading, spread trading, and portfolio trading. Each of the topics could be written as a chapter or a book. However, this book focuses on trend analysis and trend trading methods; therefore, we keep our discussion brief.

We suggest that you review Chapter 2, our results of 15-year studies on the new concepts of trend, support and resistance, and trend-following principles.

The market is like a wide river. Market trends are like powerful currents. The market follows its own way. No one can stop it. It's a law of nature: Water always flows down from high to low naturally. As Tao says, "The best of best methods is like that of water." So don't go upstream. In fact, the river is not your enemy. It doesn't even know who you are. Water in the stream follows its own way and is guided by the natural laws that underlie its movement. You cannot change it and will likely pay the price for trying. But you may attune yourself with it. Go the way it's going. First understand the trend; you will then understand how to trade it.

APPENDIX A

Interviews with AbleTrend Users

Disclaimer: The interviews and testimonials were provided by customers of AbleSys without compensation. AbleSys believes they are true, but has not independently verified them, nor has AbleSys attempted to determine the experiences of these customers after the interviews were given. Past results are not necessarily indicative of future results.

JOHN MEYER

The current financial crisis offers the absolute BEST conditions for trading, lots of movement (volatility), which provides unprecedented opportunities.

—Interview with Dr. John Meyer—M.D. and trader, Georgia*

Grace Wang: Dr. Meyer, how long have you been trading?

Dr. John Meyer: I've been trading in the futures markets for 10 years.

What do you trade?

I day trade the S&P E-mini and trade Forex.

What is your occupation?

I am a radiologist (MD).

How many other trading software programs did you use before using AbleTrend?

I have used several other software programs but none has the power of AbleTrend. Specifically, none of the others has the power to find trend changes early and reliably and then, to follow the market very precisely. I have used Bill Williams's

*Interviewed by Grace Wang, December 2008.

"Profitunity" indicators, but they are imprecise and tend to build a large pyramid that crashes against a position. I tried Advanced GET, but Elliot wave trading does not follow a market and tries to impose a wave pattern. Elliot wave experts admit that this wave pattern does not actually exist in a market 40 to 50 percent of the time. I tried using other Elliot wave trading programs but the same problem exists. No one can impose upon the market. The market tells the trader what it is doing. I used Kwikpop indicators, including their "special proprietary indicators," but there are too many indicators and the charts are cluttered.

I tried all the standard indicators, which are packaged in trading software, but they are confusing. I tried using CQG with some of their add-ons, including those of Tom Demark, but there are too many things to watch. CQG has the best support and charting app but AbleTrend is simple to use and gives a true picture of what is happening and likely to happen.

I have used John Ehlers's cycle finding methods, but they are similar to Elliot wave software in that they try to impose themselves upon the market rather than let the market show what it is actually doing. A trader does have to have knowledge of the market and chart patterns, but I find that AbleTrend is *more reliable* than my personal reading of the charts most of the time.

In your opinion, what are the main differences between other software programs and AbleTrend?

AbleTrend can find a trend very early. One of the other main differences between other software programs and AbleTrend is that AbleTrend has the truest dynamic support and resistance indicators that I have seen (trend 2). These indicators work fine with default settings. AbleTrend lets a trade develop and controls potential losses well. A trade needs to "BREATHE." The market tells the trader where it is going so that he or she can confidently follow it and make money. The program does this in real time better than a human can!

What are the most important factors in trading? How does AbleTrend help?

I have found that the most important things in trading are:

(1) Finding the trend early, (2) Entering on retracements to control losses, and (3) SUPPORT and RESISTANCE in real time. It is also important to STAY IN THE TREND until the market takes you out. You can scale out when you meet a target if you like. AbleTrend shows me how to do these things with precise accuracy and elegant simplicity. One additional very important thing is AbleTrend helps one to control one's emotions and (often wrong) "gut" feelings about the patterns. AbleTrend gives one confidence to enter and exit positions. AbleTrend gives one confidence to STAY IN a position.

Were you able to find good trades during the current financial crisis? Could you give an example?

The current financial crisis offers the absolute BEST conditions for trading, lots of movement (volatility), which provides unprecedented opportunities. I have attached two examples of AbleTrend giving buy/sell/stop signals.

FIGURE A.01 S&P 500 E-mini futures, 2-minute chart of 11/10/2008. Very good trading signals were shown for intraday trading.

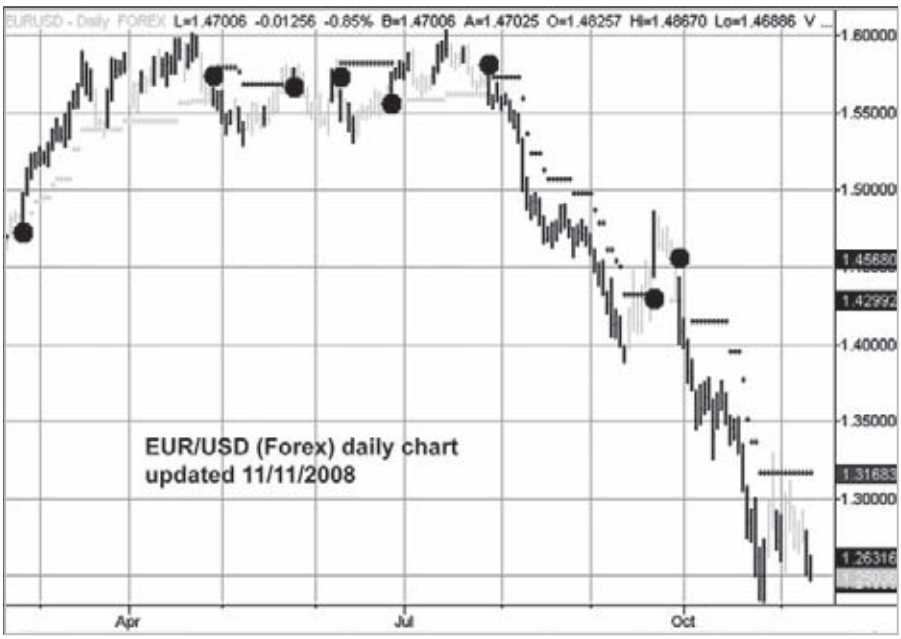


FIGURE A.02 EUR/USD daily chart of last 6 months, updated 11/11/2008. AbleTrend sell signal was first shown in July of 2008.

Do you have the confidence to use AbleTrend in trading for years to come?
Yes. Because AbleTrend is not a curve-fitting software, it facilitates a trader to build reliable trading skills to follow the market objectively, therefore I have the confidence to use AbleTrend to make a good living day trading and position trading. I love the markets and I love trading.

BOB SEIFERT

I have great confidence in AbleTrend to help my trading in the coming years.
—Interview with Robert J. Seifert—Professional trader and fund manager, Nevada*

Grace Wang: What is your occupation?
Bob Seifert: Professional trader.

How long have you been trading?
I have been a professional trader for over 30 years. I traded on the floor of the CME and CBOT for over 15 years, in addition to running two successful option trading firms.

How long have you been using the AbleSys software?
I have been using AbleTrend for about 10 years.

What types of markets do you trade?
I have traded all types of markets using AbleSys software.

How many other trading software programs did you use before using AbleTrend?
I have used many types of software over the years, including my own.

In your opinion, what are the main differences between other software programs and AbleTrend?
AbleSys gives consistent signals.

What was your experience learning to use AbleTrend? How long did it take you to feel comfortable using it?
My experience has been positive. However, you must have knowledge of markets, and know what phase of the market you are currently in to get the best results.

What do you believe are the most important factors in trading? How does AbleTrend help?
The most important factor in trading is to manage your risk capital. Money management is the key, you must know how much of your current capital can be invested in each trade. With a trend-following system, whipsawing is vicious. As a former pit trader, I like to use AbleTrend to help me find areas of congestion so that I can use it to swing trade. When the market is set to break out, I use it to keep me in a trade for the maxim profit.

*Interviewed by Grace Wang, August 2009.

Were you able to find good trades during the current financial crisis? Could you give an example or two?

The past year has represented some of the best trading opportunities I can ever remember. The problem was to manage the risk as the volatility soared. I found that AbleTrend worked extremely well on gap openings. If the market opened on a large gap to the upside/downside, I would wait until I got a buy/sell in my shortest time frame and would enter; most of the trades were quick and I had a high percentage of winners. Some of the trades would last an entire day. Obviously it helped if you only took the trade on the side with the longest time frame. Selling gaps using AbleTrend to the upside in October and November was like printing money.

Do you have the confidence to use AbleTrend in trading for years to come?

I have great confidence in AbleTrend to help my trading in the coming years. AbleTrend suits my philosophy of trading. I believe that in order to be successful you must be reactive to all markets; prediction is very difficult. I have never met anyone who can pick tops and bottoms on a constant basis. I believe that reacting mathematically to market conditions gives the best results in the long run.

I know that you have been teaching trading too. Who are your students and what do you teach?

Yes I have been involved in teaching for the past years. My students vary. I have taught novices who are just getting into trading and I have taught ex-CEOs who want to take control of their portfolios. I teach them the basics of market analysis and then use that as a building block to train them to apply those principles to the options market.

There are many options trading software programs. Do you have any opinion about software that is available?

There are many programs on the market. Some are very good, but most of them are extremely complicated. I try to reduce the options model to a basic level. Students are surprised how versatile options can be when they learn to use them to enhance many of the trades that they are currently making.

What are the key factors in options trading?

There are a couple of key factors. First, you must use sound technical analysis to get yourself into a position to react to the right options trade. Once you have a grasp on what is going on in the market, you can take that information to give you the "edge" when you initiate the trade. After the trade is in place, you must manage the risk and reward side of the trade. I give the students several ways to run their profit and loss strategies.

Secondly, you must maintain your discipline when things go wrong. I tell my students that no matter how successful you are trading, there are times when nothing will work. What separates the winners from the losers in the market is how you handle yourself when the inevitable drawdowns occur.

Finally, I teach them to manage their portfolio. I don't use many conventional methods here. I instruct them to view their options portfolio the way most professional options traders do. I give them the tools they need to go from running a single

position to the tools they need to run an entire portfolio. Once the fundamentals are in place, running an entire portfolio is not that difficult.

AbleTrend provides market direction and support and resistance levels for underlying markets. I wonder how do you apply AbleTrend to options trading?

Just because you are using options as your trading vehicle does not change the need to have sound technical skills. Identifying support and resistance levels in the underlying market is a very big key. I use AbleTrend to help me to find those levels, and then I use the directional market feature to help me **react** to the market. Options require many of the same skills that all good traders use. The difference with options, excuse the pun, is that they give you so many more options!

Can you tell me about your time at the CME?

In addition to over 30 years of successful trading, I was instrumental in designing many of the options contracts that are currently being traded at the CME Group (NASDAQ Symbol CME). I served as Chairman of the Agricultural Options Committee, Chairman [of the] Options Cabinet Committee, Vice Chairman [of] IMM Options, Vice Chairman [of the] Eurodollar Options Committee. I conducted options trading seminars on behalf of the CME in New York and Washington, and represented the exchange PAC committee in Washington.

HARVEY SAFF

Both weekly and monthly charts of AbleSys software gave specific sell signals long before this crisis happened.

—Interview with Dr. Harvey Saff—Financial advisor, Florida[*]

Grace Wang: Dr. Saff, how long have you been trading and what is your occupation?

Dr. Harvey Saff: I have been trading in the stock market for 30 years. I trade stocks, options, and mutual funds. I am a retired physician who has taken a secondary occupation in trading. I have become a financial advisor for the past eight years.

How many other trading software programs did you use before using AbleTrend?

I used a number of programs before I selected AbleSys software. The programs that I used in the past are AIQ, Wizetrade, and Bestchoice. None of them was as effective as AbleSys. The major difference is that in any time frame, intraday, daily, or weekly, AbleSys provides almost pinpoint buy and sell points. It enables me to see the exact support and resistance areas, making trading more accurate.

How are you doing with the current market situation?

As this past 10 months of financial crisis spread, many people have lost between 25 and 80 percent of their equity holdings. I am pleased to say that I have preserved ALL my

[*]Interviewed by Grace Wang, February 2009.

capital and also my clients' capital. In many instances, my clients place their life savings with me and entrust me to preserve their investments. Using the AbleSys trading software, I have been guided to stay out of the stock market since December of 2007. Both weekly and monthly charts of AbleSys software gave specific sell signals long before this crisis happened. It did not require any complex interpretation; it simply and graphically demonstrated the downtrend. My clients and I are indeed grateful.

The current financial crisis, bringing down the stock market in a way comparable to that of the Great Depression, has produced a challenging environment. The AbleSys charts have kept me out of the market, thus saving my clients from economic disaster. With the use of the charts, I have successfully traded, periodically, inverse ETFs. This has proven to be extremely profitable.

Do you have the confidence to use AbleTrend in trading for years to come?

Due to the nature of the AbleSys program, I foresee using AbleSys both currently and in the years to come. It has proven to be an accurate program under all market conditions. As an example, I traded the inverse ETFs DXD and QLD in the month of January. AbleSys clearly guided me to capture and profit from the downward movement in the market.

GERRY WOLLERT

The AbleTrend AutoScan feature enables me to quickly roll through more than 200 potential ETFs in less than 5 minutes, as I look for new trading opportunities.

—Interview with Mr. Gerry Wollert—Fund manager and financial web site owner, Florida*

Grace Wang: Mr. Wollert, how long have you been trading?

Gerry Wollert: I bought my first five stocks back in 1964 after taking an evening stock market course at a local community college. I have been trading for over 44 years with very few interruptions.

What do you trade?

I trade ETFs (Exchange Traded Funds). I like the diversification that these trading vehicles provide. ETFs trade just like stocks. They have no minimum holding periods or early redemption fees, which make trading ETFs much more attractive than trading mutual funds. ETFs can also be sold short. Lastly, there are a number of inverse ETFs that can be traded in an IRA during bear market periods.

How long have you been using AbleSys software?

I have been using AbleTrend from AbleSys for over 10 years.

How many other trading software programs did you use before using AbleTrend?

Over the last couple of decades, I have purchased at least a dozen different software programs. Most of them are on the shelf of my closet gathering dust. Only AbleTrend

*Interviewed by Grace Wang, September 2009.

has continued to be my primary trading tool. It truly helps me decide what to trade, when to trade it, and when to get out after I enter a trade.

In your opinion, what are the main differences between other software programs and AbleTrend?

The AbleTrend AutoScan feature enables me to quickly roll through more than 200 potential ETFs in less than 5 minutes, as I look for new trading opportunities.

AbleTrend provides its trading signals for all markets and for all time frames. Once you learn how to trade one market, you will know how to trade any other market with AbleTrend.

There is no data to download. I use eSignal data and there is a seamless interface between AbleTrend and eSignal. The buy and sell signals are clear and require little or no interpretation.

The T2 indicator moves up during a long trade in a stairstep fashion. There is no need to calculate stops—T2 does this for you.

Were you able to find good trades during the current financial crisis?

Since I primarily trade in several different IRA accounts, I generally look for long candidates. During the period October 2007 to February 2009, it was very difficult to find attractive buy candidates. My buy discipline kept the majority of my funds allocated to the safety of the money market and/or inverse ETFs. In mid-March 2009, AbleTrend started giving me buy signals and I have been fully invested ever since. Once again, AbleTrend told me when to get out as well as when it was "safe to go back into the water."

MIKE WEINGART

AbleTrend 7.0 empowered me to create my own rule-based strategies with back-testing without writing programming codes.

—Interview with Mike Weingart—MBA, CTA, fund manager, Florida*

Grace Wang: How long have you been using AbleSys software? What strategy do you use?

Mike Weingart: I started with AbleSys back in 2004. I started with a 30-day trial and liked the software. It was easy to use and set up. In 2007, with the release of the new AbleTrend 7.0 version, I was empowered to create my own rule-based strategy with back-testing without writing programming codes. I was able to develop my own fully mechanical system with AbleTrend 7.0 for the Forex market. I now use my own system to manage clients' funds.

*Interviewed by Grace Wang, August 2008.

What is your occupation?

I am now a licensed CTA and I manage money for clients full-time. I owned and operated a finance company that originated residential and commercial loans.

What are the main differences between AbleSys and other programs?

I use AbleSys in a fully mechanical way, optimized for each market. It is like no other program. I am always in the market, either long or short, as the software handles different volatilities and market changes in truly robust and consistent ways. Other programs I have seen are okay for the entries but leave users on their own for the exits. These programs do not give clear indications when to get out if the trade goes wrong or when to book profits. AbleTrend, on the other hand, handles the following key items well:

1) Early entry.

2) Stop loss placement calculated for volatility and not a fixed number.

3) Trailing stops that calculate exits (support/resistance) and keep me in the trend longer than humanly would ever stay in to maximize profits.

4) Money Management or size calculation.

Were you able to find good trades during the current financial crisis? Can you give an example?

I sure can. I was short AUD/USD, GBP/JPY, GBP/USD, and EUR/USD all at the same time in September and October using 240- and 480-minute charts. Most of them gave short signals on about October 20 and buy-to-cover signals on October 27. I know that on GBP/JPY, I booked over 2,000 pips in seven days. The others generated gains of 1,100 to 1,500 pips, so that I had about 5,000 pips in gains for the week. It was truly unbelievable indeed. Using the longer time interval charts was a walk in the park. The volatility did not matter because AbleSys software got my clients and me into the market very early. It was just a matter of how much profit I would have when the storm was over. That may have been a once-in-a-lifetime event, but I was part of it thanks to AbleSys and my strategy.

ALEX KUAN

I have been using AbleSys software for more than 10 years or so, and I trade commodities and Forex markets.

—Interview with Dr. Alex Kuan—Trader, Singapore*

*Interviewed by Grace Wang, July 2009.

Grace Wang: Dr. Kuan, how long have you been trading?

Dr. Alex Kuan: I have been trading for more than 15 years.

How long have you been using the AbleSys software and what do you trade?

I have been using AbleSys software for more than 10 years or so, and I trade commodities and Forex markets.

What is your occupation?

Medical doctor.

How many other trading software programs did you use before using AbleTrend?

Perhaps two to three day-trading software.

In your opinion, what are the main differences between other software programs and AbleTrend?

AbleTrend, if used properly, can help you identify trends on a consistent basis.

What was your experience learning to use AbleTrend? How long did it take you to feel comfortable using it?

About one week.

What do you believe are the most important factors in trading? How does AbleTrend help?

Money management and having a reliable trading edge. AbleTrend gives me that edge.

Were you able to find good trades during the current financial crisis? Could you give an example or two?

Yes. Sugar and soybeans.

Do you have the confidence to use AbleTrend in trading for years to come?

Yes.

Could you share some of the exciting trades that you've made over the years and explain how AbleTrend helped you succeed?

To be honest, I have tweaked and taken AbleTrend to a new level. I am now able to size up any market by looking at both major and minor time frames. Some of my approaches, trade setup patterns are not even taught by you guys but have been observed in your software on a consistent basis. Observations, which cannot be ignored, have proved highly profitable. I would go as far as to say that accuracy in a properly analyzed market can be as high as 70 to 80 percent. The only "problem" is that such setups don't happen every day and it takes time and patience for everything to be "in phase" before I hit the buy/sell button. My setups are classified and I hope you understand my wish for them to remain so. I use AbleTrend 7.0 to fine-tune position trades and do not do intraday trading.

At the moment, I'm watching for potential moves in the EURGBP, DX, Gold, and soybeans. The rest of the markets do not fit into any meaningful setups. I usually only make 20 to 30 trades a year and depend on only three to four mega moves to keep me financially comfortable. That, I feel, is the only way to trade profitably.

REMCO EENINK

The main difference between AbleTrend and other software programs is the volatility-based stops . . .

—Interview with Remco Eenink—Retired and trader, The Netherlands*

Grace Wang: Mr. Eenink, how long have you been trading?

Remco Eenink: I have been trading and investing since 1994.

How long have you been using the AbleSys software?

I have been using the AbleSys real time trading software since early 2006.

What types of markets do you trade?

I started out with stocks and later I have traded currency futures, silver and gold futures, bonds, oil and natural gas futures, and the Emini stock index futures as well. Now I am only trading the Forex cash EUR and GBP against the USD.

What is your occupation?

I am in early retirement now, and before, I taught German and German literature at college.

How many other trading software programs did you use before using AbleTrend?

I think I bought over 10 different software programs before using AbleTrend.

In your opinion, what are the main differences between other software programs and AbleTrend?

The main difference between AbleTrend and other software programs is the volatility-based stops and that the program uses a trade signal which must be followed by a trend confirmation signal. The software is also suitable for position trading and intraday trading.

What was your experience learning to use AbleTrend? How long did it take you to feel comfortable using it?

I don't exaggerate by saying that the software is extremely user friendly and its trading methods are very clear and well documented. It did take me only a few hours to get started and to be able to use the basics of the program. Of course, it takes a little more time to master the different trading strategies for position-, swing-, and day trading with different time intervals.

What do you believe are the most important factors in trading? How does AbleTrend help?

The most important factors to be successful in trading in my opinion are not only to know what to do but actually do what you know. By this I mean that all of

*Interviewed by Grace Wang, July 2009.

us know we must be disciplined and only enter when initial risk is small compared to the possible gains, but few traders actually put their own rules in practice. AbleTrend is a great help for the trader because it gives us objective stops and helps us to enter a trend with low risk by using a trade signal, which must be confirmed by a trend signal (T2). Then it is best to wait for a pullback close to the EMA to obtain a low-risk entry point. The way I trade is that I sit in the living room with the door open to my study and when I hear the trade signal I go to my study next door and check for the T2 signal, and if T1 is confirmed by T2, I will sit in my study and wait for the pullback. After I have entered a trade, I return to the living room and check the trade every 15 minutes or every 30 minutes when using a 30-minute chart.

If the entry has been done correctly, it is a matter of discipline to let AbleTrend tell you when to get out. In most cases this will be by being stopped out. AbleTrend makes it much easier for the trader to see what is happening. All this sounds simple and it is, but it is not easy to follow these rules. Many times you feel the urge to close a trade because you think it will not work out or you think your stop will be hit. The only way to trade correctly is not to think and not to guess but simply follow the rules of the trade indicated by AbleTrend, because AbleTrend lets the market itself decide when a trade is over. This is the hard part: to let AbleTrend decide when the trade is over, but it is extremely important for a trader's success and this is exactly the strength of AbleTrend, which shows me exactly when a trade is over. I only enter a trade from 8 A.M. to 3 P.M. Amsterdam time, because I have found that the best trades and the biggest moves start before 3 P.M. If I am in a trade, I stay in until being stopped out or close my trade at 9 P.M. because I have found that volume starts to drop after 9 P.M. very often. If I have not entered a trade before 3 P.M., then I close down my computer and call it a day.

Do you have the confidence to use AbleTrend in trading for years to come?
Absolutely.

Could you share some of the exciting trades that you've made over the years and explain how AbleTrend helped you succeed?
Here I refer to the following two trades:

August 10, 2009. I went short on the GBP_USD.

1 lot of 100,000. Entry at 9 A.M. Amsterdam time, 1 hour after the European open. Entry at 1.66714 and close at 9 P.M. at 1.64594. Profit 1849 USD.

Initial stop was at 1.6711 (T2) so my initial risk was about 400 USD. I always strive to a risk of around 400 USD and not much more. I used a 15-minute chart (to save space, the chart is not included here) and T1 together with T2. As you can see, at that point the 30-minute chart also gave a red bar and there was a pullback close to the 10 EMA. Please see entry arrow red and exit arrow blue. I always close positions at 9 P.M. This trade was done according to the STM method as is very thoroughly described in the manual and is also shown in the free webinars.

August 3, 2009. I went long on the EUR_USD.

1 lot of 100,000. Entry at 11 A.M. Amsterdam time. Entry at 1.42734 and close at 9 P.M. at 1.440057. Profit 1271.70.

Here I entered on a blue bar but near the 10 EMA and my stop was at 1.4237 (T2), and that resulted in an initial risk of 360 USD. Please see little arrows for entry and exit. Here, too, you can see that there is at the same time a buy signal in the 30-minute chart. I like to trade the 15-minute chart for Forex because the initial risk is smaller.

Of course, not every trade is a winner but when the losses are kept small, I can make good profits because of the high potential in the EUR and the GBP in intraday trading.

CHRIS ANTHONY

The main benefit of AbleTrend is spotting longer trends that allow you to catch a runner.

—Interview with Chris Anthony—Full-time day trader, North Carolina*

Grace Wang: How long have you been trading?

Chris Anthony: I have been trading stocks and options for over 20 years but took up futures trading full time about a year ago . . . and I am glad I did. This past fall after suffering tremendous losses in longer-term options spreads I have decided to quit all other forms of trading and focus exclusively on futures, primarily index and currencies.

How long have you been using the AbleSys software?

I believe I signed up in June 2009.

What types of markets do you trade?

I trade ES and YM minis primarily on the CME but I also trade various currency futures as well.

What is your occupation?

I am a full-time day trader.

How many other trading software programs did you use before using AbleTrend?

I used charting software from eSignal and Ninja prior to signing up with AbleTrend. I did lots of research and picked AbleTrend as I perceived it to be the best.

*Interviewed by Grace Wang, July 2009.

In your opinion, what are the main differences between other software programs and AbleTrend?

The main benefit of AbleTrend is spotting longer trends that allow you to catch a runner. This happens a few times a month and it's not unusual to make as much or more on these few days as you do the other days combined. For example, if you catch a runner four days a month, it can make you more than the other 16 days combined. This is the biggest advantage that I see. And it's very easy to use and understand. I have adjusted the settings to fit my style with great success.

What was your experience learning to use AbleTrend? How long did it take you to feel comfortable using it?

It took me about three months of simulated trading to understand how to use AbleTrend. In fact I once changed my plan a bit and stopped relying on AbleTrend as my primary indicator and I began losing money. I have since switched back to AbleTrend and am making money once again.

What do you believe are the most important factors in trading? How does AbleTrend help?

I believe the most important factor in trading is psychology; without a proper mindset, it's impossible for any system to work. The second most important factor is to understand when to enter and exit trades, and the third is to know the money management. AbleTrend handles the second one very well.

Were you able to find good trades during the current financial crisis? Could you give an example or two?

The best time to be a day trader was when the VIX was over 50 as the market swings were very large, and if you were able to be on the right side of a trade you could make quite a bit. During that time it was fairly easy to earn 6 to 8 full points on most trades on the ES. The market volatility has diminished considerably so my daily expectations have been reduced significantly. . . . I am now happy with 3 points on an ES trade . . . but again, catch a runner every now and then and it's all good.

Do you have the confidence to use AbleTrend in trading for years to come?

Yes, I will continue to use AbleTrend and only hope that some additions are made to the indicators. I currently supplement AbleTrend with other charting software so I can see a full range of indicators. These additions have made me a better trader and have reduced my losses and made my exits timelier.

Could you share some of the exciting trades that you've made over the years and explain how AbleTrend helped you succeed?

Without reviewing my past year's history, I can simply tell you this: Last week was a fairly choppy week, with Friday being a very good trend day. Trading on average 12 contracts, I was able to earn 226 full points on the ES or an average of 1.45 points per trade . . . not particularly spectacular but given the chop of the week, it was a good week. I had 27 trades with 6 losing trades or about a 78 percent hit rate. Without AbleTrend I do not think I could have achieved this rate, and week

over week I typically experience about a 70 percent or greater hit rate . . . and four of the six losing trades were not confirmed by AbleTrend. . . . I was picking a top or bottom using my other indicators. Had I strictly followed AbleTrend, I would have earned an additional 138 full points. I am glad that you asked me to do this review. Next week I will follow AbleTrend much more closely and watch my profits go up quicker.

JIM KANE

AbleTrend T2 indicator provides excellent stops as well as entry points.
—Interview with Mr. Jim Kane—Retired and trader, Texas*

Grace Wang: Mr. Jim Kane, how long have you been trading?

Jim Kane: I have been trading, on and off, for 20 years. Several times I got so frustrated that I switched to mutual funds, but that never went well.

How long have you been using AbleSys software?

I have been using AbleTrend software since early 2007.

What do you trade?

Stocks, ETFs, plus some time decay option trades.

What is your occupation?

I am a retired US Air Force dentist and am currently employed as a computer programmer.

How many other trading software programs did you use before using AbleTrend?

I used many other trading software programs as well as numerous newsletters. I currently use Zacks research wizard to help me pick stocks to trade. Zacks suggests what stocks to trade and AbleTrend tells me how to trade them.

What is the most important factor in trading? How does AbleTrend help?

Risk management. AbleTrend T2 indicator provides excellent stops as well as entry points.

Do you have the confidence to use AbleTrend in trading for years to come?

Yes, if AbleTrend software can handle the 2008 market, it can handle any market.

Could you share some of the exciting trades that you've made?

My best position trades were probably shorts in MTH, BC, and CC. They just kept going down. Stops based on the AbleTrend T2 indicator were good and helped me move in and out of the stocks to maximize gains. My first year of using AbleTrend, 2007, was the first year in 20 years of investing in which I made more money trading than I made at my day job. On the long side, AbleTrend T2 indicated trending stock behavior in WLT in January 2008. I had a good run in WLT until early June.

*Interviewed by Grace Wang, December 2008.

DAVID FAWKES

You don't need to invent a trading system. AbleTrend automatically provides you with clear buy and sell signals.

—Interview with David Fawkes—Trader, Florida*

Grace Wang: Mr. Fawkes, how long have you been trading?

David Fawkes: I have been trading since 1991.

How long have you been using the AbleSys software?

I obtained a trial version of the software in February 2007 and went to your seminar in Atlantic City in May 2007. The seminar and the manual were extremely helpful. I wish you would have more seminars or have meetings during the year where investors can share their experiences.

Before using the AbleSys technical software, I was a fundamental investor holding positions regardless of market fluctuations. However, I had noticed over the years that even fundamentally good investments fluctuate between over and under evaluation. In some instances, fundamentally good investments actually went bankrupt. How can you avoid holding a fundamentally good investment until you have a complete loss of all of your money?

I needed an early warning system to help me to hold good investments when they are going up and lighten up on them when they are going down.

What types of markets do you trade?

I am a dedicated emerging market high yield currency investor. I strictly invest in Turkish lira, Brazilian real, South African rand, and Mexican pesos. I invest in them through Eurobonds, currency forwards and brokerage cash accounts. I utilize margin and the carry trade (up to 10 percent).

There have been a number of scholarly works that unequivocally prove that high-yielding currencies appreciate over lower-yielding currencies. If you can find an investment that pays you interest north of 10 percent and appreciates in value, you have won half the battle.

Over the last 10 years, these currencies have provided an annualized appreciation of 20 percent, with lower volatility than the stock market. Approximately half of the returns have been provided by the currency interest income.

However, high-yielding currencies do experience violent sell-offs. I utilize the AbleSys system to provide me with sell stops. Once the sell-off is completed, the currencies gradually start appreciating again.

What is your occupation?

I'm a CPA, which helps with the number crunching!

*Interviewed by Grace Wang, September 2009.

How many other trading software programs did you use before using AbleTrend?

You name it and I have tried it over the last 18 years. Well over a dozen technical systems.

In your opinion, what are the main differences between other software programs and AbleTrend?

You don't need to invent a trading system. AbleTrend automatically provides you with clear buy and sell signals.

What was your experience learning to use AbleTrend? How long did it take you to feel comfortable using it?

It took me a little less than a year to get comfortable with the system. It is important to modify the system to the markets and time frames to which you trade. I am a medium-term investor investing in trends, which normally last at least one year in length.

I became a true believer in the system in late 2008 when I witnessed the system provide a Daily T2 sell signal on August 13, 2008, for the Brazilian real. Brazil was fundamentally strong and after six years of high yields and currency appreciation, AbleTrend gave a sell signal. I was skeptical and did not sell or hedge my currency position until September 2008. By that time the currency had already significantly depreciated in value.

Once I believed what the system was telling me, I waited until a Daily T2 buy signal was given on March 13, 2009. I bought back my position and experienced significant returns.

What do you believe are the most important factors in trading? How does AbleTrend help?

Before getting started with AbleSys, you need to have a complete understanding of what markets you are trading. Don't look to AbleSys to select your investments. Look to AbleSys to tell you when to buy or short them. You need to have a complete strategy that continuously evolves over time. Your strategy should be documented in writing. It should have a thesis (kind of a bible of what you will and will not do), and it must have lots of detail of what you will do when your investments go against you. Lastly, it should have a list of things you absolutely will not do . . . but are tempted to do . . . like day trading (for me).

Next, you need to determine what time frame works best for your investments. If you are trading currencies, the Daily T2 provides an excellent indicator. If you are trading emerging market equities, due to the volatility, you need a Weekly T2 signal. Being a medium-term trader (holding positions for about a year), you need to ensure that your system doesn't provide you with too many buy/sell signals.

You must also have your sell/short strategy in place. For example, when shorting iShares Brazil you need to gradually go into your position. For equities I will gradually short between the Daily T2 and the Weekly T2. You must always remember that

an investment does not automatically become buy or sell overnight. I've also modified the T2 signal for currencies to make the sell signal a little slower (I call it an Enhanced T2).

Were you able to find good trades during the current financial crisis? Could you give an example or two?

One for the Brazilian real and the other for the Turkish lira. Daily T2 buy signals were given for these currencies in March 2009. I bought on these signals and have made 40 percent so far this year.

Do you have the confidence to use AbleTrend in trading for years to come?

Absolutely.

APPENDIX B

Quick Reference for STM

STM TRADING METHOD

1. Setup of STM:

Simplified Trading Method (STM) is one of the common ways to trade markets with AbleTrend software. Add three indicators AbleTrend1 (Trend1, T1), AbleTrend2 (Trend2, T2), and Exponential Moving Average (EMA) to a chart with default settings. (See Figures B.01–B.04.)

2. Entry Rules of STM:

There is only one entry rule: **There must be agreement between the T1 and T2 indicators.** For additional guidance, we look for an entry point close to the EMA line. We try to avoid trading when the market is moving sideways.

3. Exit Rules of STM:

The exit rule is very simple: **Follow Trend2.**

AbleSys has been offering the Trend2 indicator since 1994. And it is highly regarded by many traders. At AbleSys, we say, "Don't fight Trend2."

Using Trend2 as an exit strategy is almost entirely mechanical.

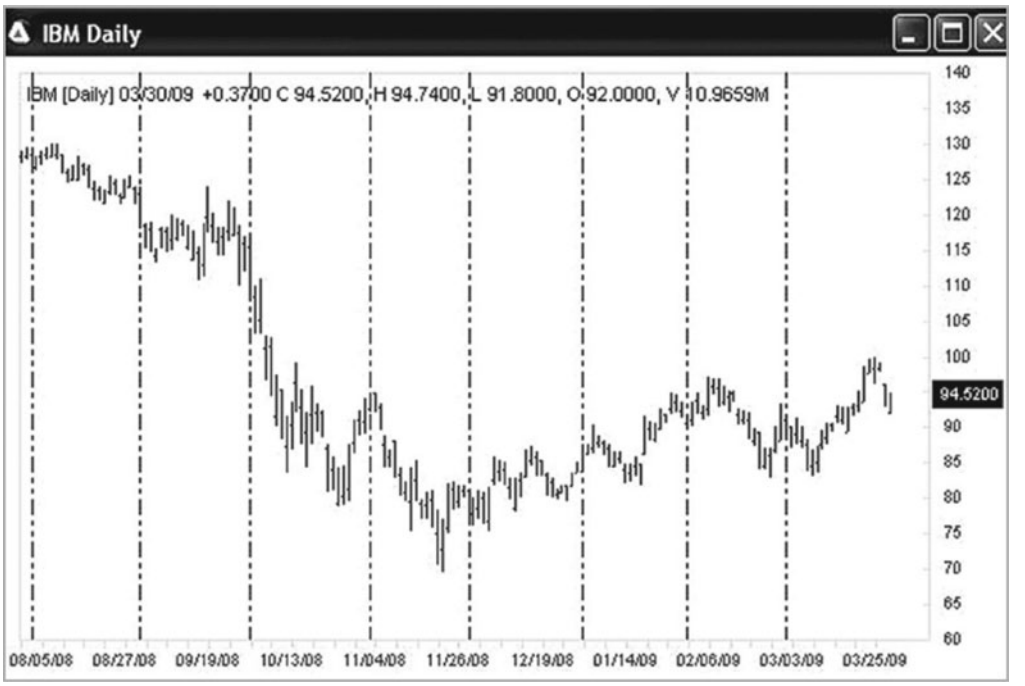


FIGURE B.01 This is an IBM daily chart without any indicator added.

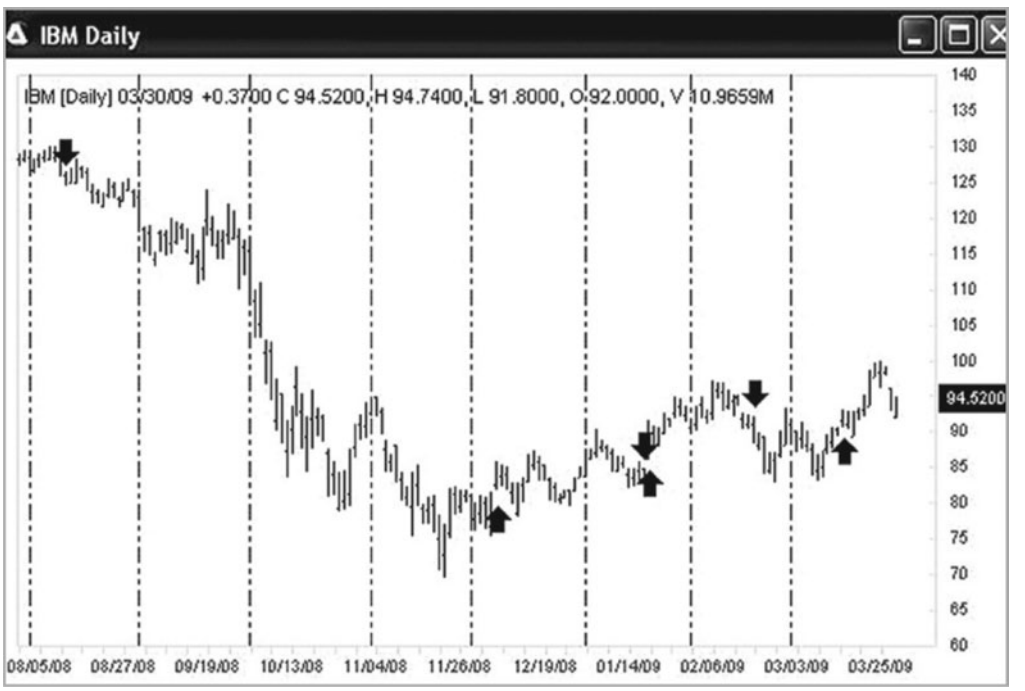


FIGURE B.02 T1 indicator is added. Up-arrows indicate the beginning of uptrends, and down-arrows indicate the beginning of downtrends.

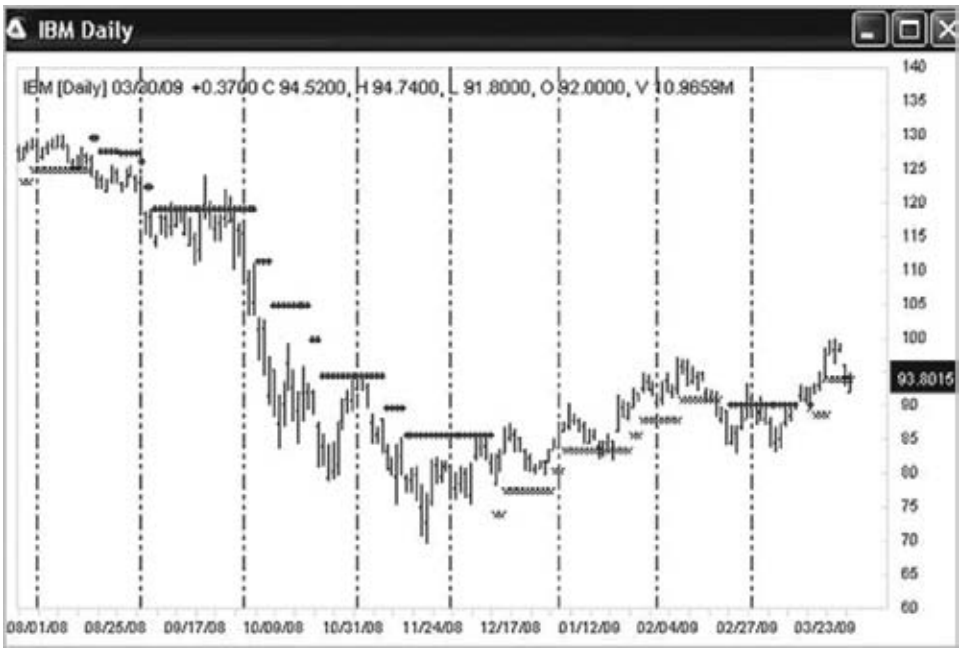


FIGURE B.03 T2 indicator is added. Small crosses (x) below bars indicate an uptrend, and small dots above bars indicate a downtrend. Values of the crosses and dots are key support/resistance levels used as protection stops to exit the trade if the position proves to be wrong.

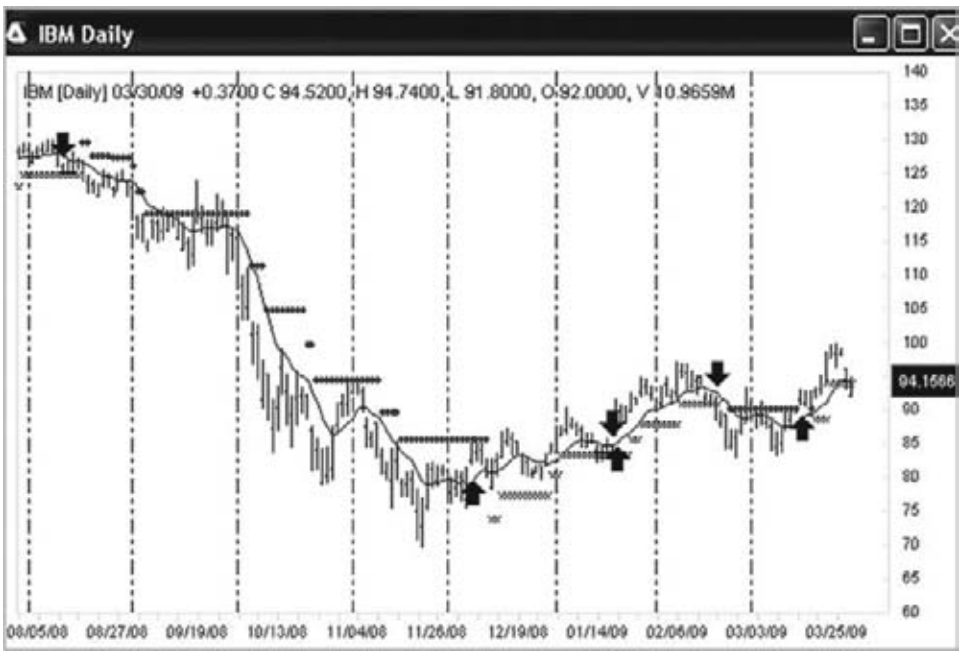


FIGURE B.04 IBM daily chart with a line of Exponential Moving Average and T1 and T2 indicators added. All indicators are set up with default parameters.

Exit your position if two consecutive bars close on the wrong side of the exponential moving average. Also take a part of the profits if the market had a big run and is too far away from the EMA line.

Buy/Sell/Exit signals are showed in Figure B.05:

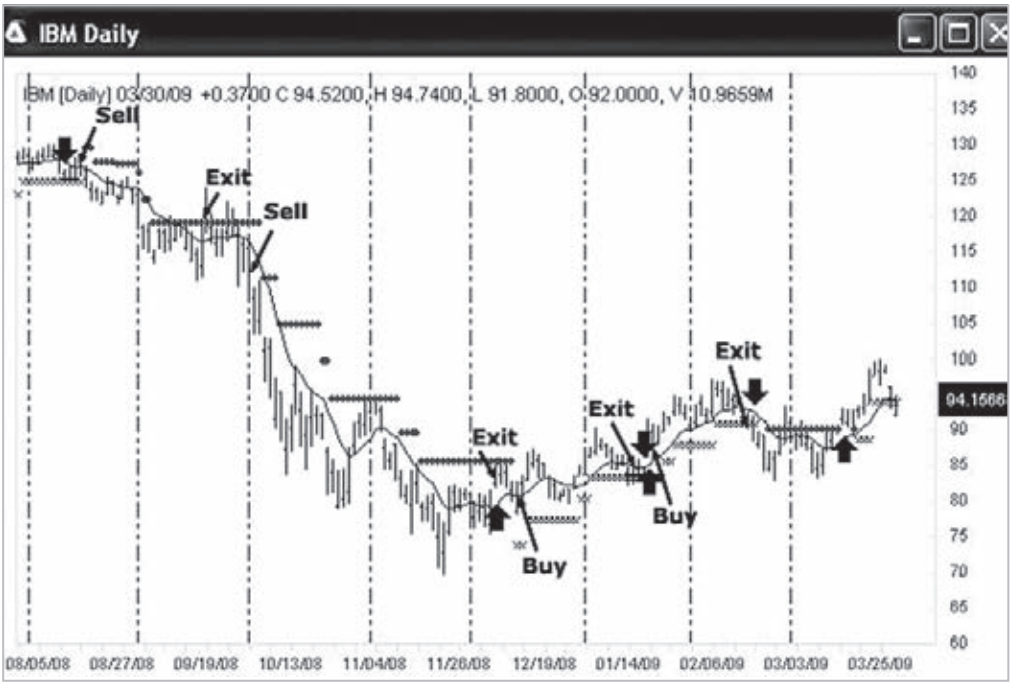


FIGURE B.05 Examples of STM trading signals for the IBM daily chart. Based on the entry and exit rules mentioned above, we have marked the Buy/Sell/Exit signals on this chart.

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Co-founder and Sr. Vice President of AbleSys Corporation

Grace received her M.A. degree in physical education and gymnastics from the Shanghai Institute of Physical Education (China), and her M.A. degree in sports psychology from California State University, Sacramento. She co-founded AbleSys Corporation in 1994. Grace has been a commodity trading advisor (CTA) registered with the CFTC since 1995. She has been a panel speaker at various financial trading conferences since 1999.

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ISBN 978-0-470-58120-9